DOCUMENT RESUME

ED 428 922 RC 021 955

AUTHOR	Reyhner, Jon, Ed.; Cantoni, Gina, Ed.; St. Clair, Robert N., Ed.; Yazzie, Evangeline Parsons, Ed.
TITLE	Revitalizing Indigenous Languages. Papers presented at the Annual Stabilizing Indigenous Languages Symposium (5th, Louisville, KY, May 15-16, 1998).
INSTITUTION	Northern Arizona Univ., Flagstaff. Center for Excellence in Education.
ISBN	ISBN-0-9670554-0-7
PUB DATE	1999-00-00
NOTE	163p.; For selected individual papers, see RC 021 956-966.
AVAILABLE FROM	Center for Excellence in Education, Northern Arizona University, P.O. Box 5774, Flagstaff, AZ 86011-5774; Tel: 520-523-4710 ($10.00 plus $3.00 postage). Individual papers available at Web site: http://jan.ucc.nau.edu/~jar/RIL_Contents.html
PUB TYPE	Books (010) -- Collected Works - Proceedings (021)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	*American Indian Languages; Community Education; Elementary Secondary Education; Foreign Countries; Higher Education; *Language Maintenance; Literacy; Material Development; *Second Language Instruction; Teaching Methods
IDENTIFIERS	*Endangered Languages

ABSTRACT

This volume of conference papers examines issues and approaches in the revitalization of American Indian and other indigenous languages. Sections discuss obstacles and opportunities for language revitalization, language revitalization efforts and approaches, the role of writing in language revitalization, and using technology in language revitalization. Following an introduction, "Some Basics of Indigenous Language Revitalization" (Jon Reyhner), the 11 papers are: (1) "Some Rare and Radical Ideas for Keeping Indigenous Languages Alive" (Richard Littlebear); (2) "Running the Gauntlet of an Indigenous Language Program" (Steve Greymorning); (3) "Sm'algyax Language Renewal: Prospects and Options" (Daniel S. Rubin); (4) "Reversing Language Shift: Can Kwak'wala Be Revived?" (Stan J. Anonby); (5) "Using TPR-Storytelling To Develop Fluency and Literacy in Native American Languages" (Gina P. Cantoni); (6) "Documenting and Maintaining Native American Languages for the 21st Century: The Indiana University Model" (Douglas R. Parks, Julia Kushner, Wallace Hooper, Francis Flavin, Delilah Yellow Bird, Selena Ditmar); (7) "The Place of Writing In Preserving an Oral Language" (Ruth Bennett, Pam Mattz, Silish Jackson, Harold Campbell); (8) "Indigenous Language Codification: Cultural Effects" (Brian Bielenberg); (9) "Enhancing Language Material Availability Using Computers" (Mizuki Miyashita, Laura A. Moll); (10) "The New Mass Media and the Shaping of Amazigh Identity" (Amar Almasude); and (11) "Self-Publishing Indigenous Language Materials" (Robert N. St. Clair, John Busch, B. Joanne Webb). Contains references in most papers, author profiles, and a poem, "Repatriated Bones, Unrepatriated Spirits" (Richard Littlebear). (SV)

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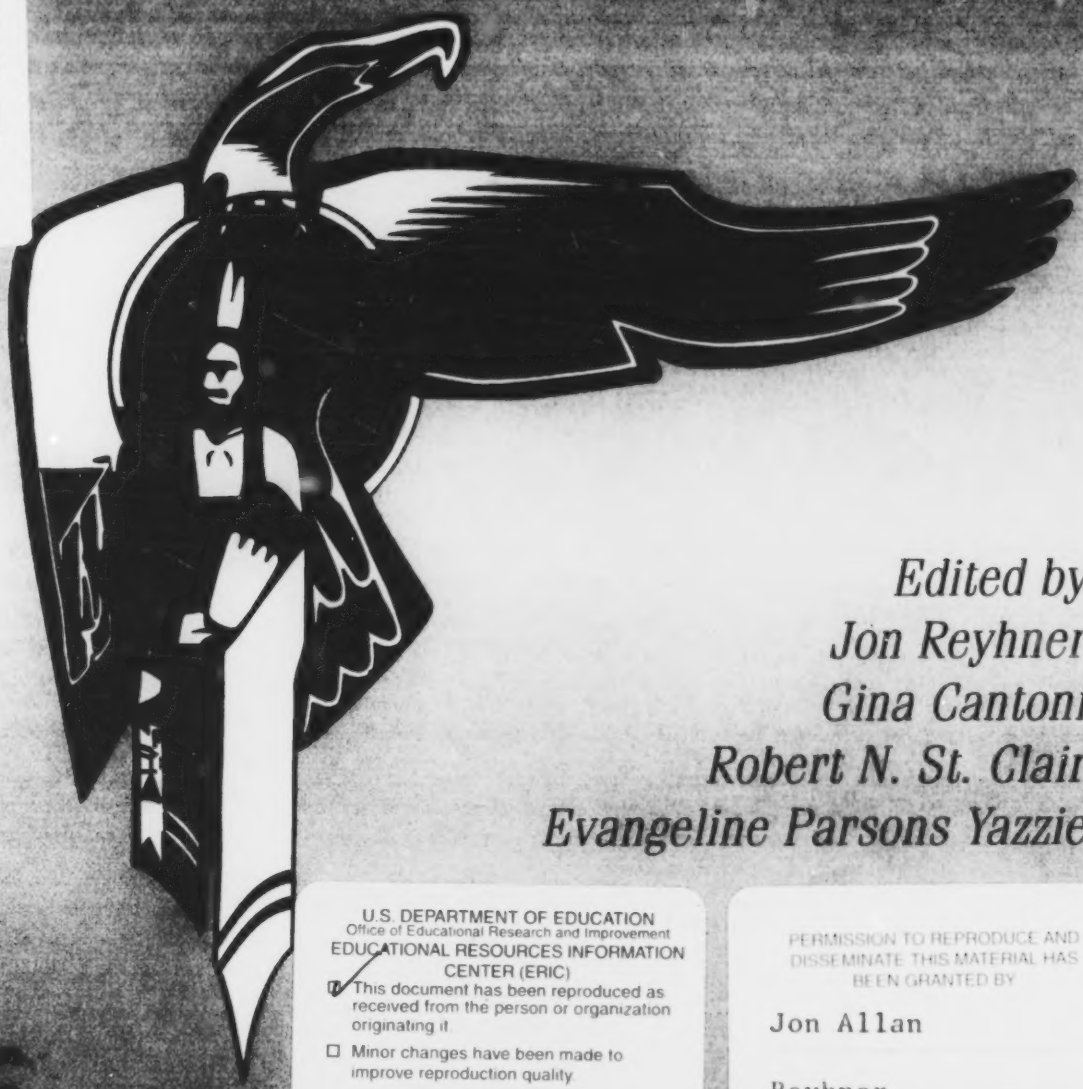

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Revitalizing Indigenous Languages

edited by
Jon Reyhner
Gina Cantoni
Robert N. St. Clair
Evangeline Parsons Yazzie

Flagstaff, Arizona
1999

Revitalizing Indigenous Languages is a compilation of papers presented at the Fifth Annual Stabilizing Indigenous Languages Symposium on May 15 and 16, 1998, at the Galt House East in Louisville, Kentucky.

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ISBN 0-9670554-0-7
Library of Congress Catalog Card Number: 99-70356

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Repatriated Bones, Unrepatriated Spirits

Richard Littlebear

We were brought back.

We were brought back here
to a place we don't know.

We were brought back here
to a place where we left no tracks.

We were brought back here
to a place we've only passed
through when we moved camp
or were hunting,
or were looking for enemies.

We were brought back here
and yet we are lost.

We were brought back
to a place where we are confused.

But now we are starting to sing our songs.
We are singing our songs
that will help us find our way.

We are singing our songs
because we want to rest in peace.

We are singing our songs
so that the people who have been so friendly
to us will also be at rest.

We came back to a people who
look like us but whose language
we do not understand anymore.

Yet we know in our hearts
they are feeling good too, to have
us back here among them.

We are back here now but preparing
to journey on.

We are singing our songs of joy and
we are gradually, gradually becoming happy
knowing we can now travel on
and finally be at rest.

Introduction

Some Basics of Indigenous Language Revitalization

Jon Reyhner

Drawing from papers presented at the five Stabilizing Indigenous Languages symposiums held since 1994, activities are recommended for language revitalization at each of Joshua Fishman's eight stages of language loss. The role of writing in indigenous language revitalization is discussed, and two types of language use, primary and secondary discourse, are described. The conclusion stresses the importance of motivating language learners and using teaching methods and materials that have proven effective in indigenous communities.

Symposiums on teaching indigenous languages have been held annually since 1994 under the cosponsorship of Northern Arizona University's Bilingual Multicultural Education Program in its Center for Excellence in Education. The symposiums have featured a wide range of presentations, ranging from marketing the value of native languages, to implementing immersion teaching programs, to using Total Physical Response teaching techniques, to developing indigenous language textbooks useful for children, and even to teaching languages over the telephone.

In the United States there is an "English-Only" political movement that questions the value of teaching languages other than English, including indigenous languages. Throughout the symposiums there has been a theme of how language and culture are intimately entwined and cannot be separated. The importance of cultural retention, and thus indigenous language retention, was brought home to me at the third symposium in Anchorage, Alaska, when I picked up a card describing Iñupiaq Eskimo values. One side of the card read:

> Every Iñupiaq is responsible to all other Iñupiat for the survival of our cultural spirit, and the values and traditions through which it survives. Through our extended family, we retain, teach, and live our Iñupiaq way.

The other side read, "With guidance and support from Elders, we must teach our children Iñupiaq values" and then the card listed the values of "knowledge of language, sharing, respect for others, cooperation, respect for elders, love for children, hard work, knowledge of family tree, avoidance of conflict, respect for nature, spirituality, humor, family roles, hunter success, domestic skills, humility, [and] responsibility to tribe." The card concluded with "OUR UNDERSTANDING OF OUR UNIVERSE AND OUR PLACE IN IT IS A BELIEF IN GOD AND A RESPECT FOR ALL HIS CREATIONS." I have kept this card in my wallet as a reminder that indigenous language revitalization is part of a larger

attempt by indigenous peoples to retain their cultural strengths in the face of the demoralizing assaults of an all-pervasive modern individualistic, materialistic, and hedonistic technological culture. The card reminds me of why it is so important to do everything we can to help the efforts of any person or group that wants to work to preserve their language. It is the earnest hope of the editors of this volume that the papers gathered here from the Fifth Annual Stabilizing Indigenous Languages Symposium held in Louisville, Kentucky, in May 1998 will, along with the two previous symposium publications: *Stabilizing Indigenous Languages* (Cantoni, 1996) and *Teaching Indigenous Languages* (Reyhner, 1997), help indigenous language teachers and activists in their efforts to save their languages and cultures.

The renowned sociolinguist and expert on endangered languages Joshua Fishman emphasized in speeches at the first two Stabilizing Indigenous Languages symposiums that schools can only have a limited role in keeping indigenous languages alive. Other symposium speakers and participants echoed Dr. Fishman's belief that the intergenerational transmission of language in the home from parents to young children is the key to keeping indigenous languages alive; however, schools can play either a positive or negative role in supporting the efforts of indigenous parents and communities.

Fishman's eight stages of language loss

Based on his study of minority languages worldwide, Fishman postulated in his landmark 1991 book *Reversing Language Shift* a continuum of eight stages of language loss with stage eight being the closest to total extinction and stage one being the closest to dynamic survival. Fishman's eight stages are summarized below and in Figure 1 along with suggestions on what can be done to promote indigenous language use at each stage based on presentations at the Stabilizing Indigenous Languages symposiums and other sources. It is important to remember that one of Fishman's stages can only roughly approximate the real situation of a particular indigenous language, and it is imperative to understand that different approaches to language revitalization are called for depending upon the current health of a language and unique local conditions.

The most seriously endangered languages are in Fishman's stage eight and have only a few isolated elderly speakers. Partly as a result of years of concerted language suppression by the United States government, many American Indian tribes, such as the Salish and Kootenai in Montana, Pawnee in Oklahoma, Arikara in North Dakota, and almost all of the remaining fifty Indian languages of California, are in Fishman's eighth stage. **Stage eight** languages are on the verge of extinction. Speakers need to be recorded using media that is not subject to degradation over time, such as VHS videotapes are, and through written transcripts using phonetic alphabets that catch the nuances of the language's sound system. However, this archiving of language knowledge can be tantamount to an admission of defeat, with the language becoming a museum piece. While, stage eight elders seldom have the stamina to teach young children, especially in large groups, they can teach young adults singly or in small groups. The Native Californian

Figure 1. Suggested Interventions Based on Different Stages of Language Endangerment [Adapted from Fishman's (1991, pp. 88-109) Graded Intergenerational Disruption Scale for Threatened Languages]

Current Status of Language	Suggested Interventions to Strengthen Language
Stage 8: Only a few elders speak the language.	Implement Hinton's (1994) "Language Apprentice" Model where fluent elders are teamed one-on-one with young adults who want to learn the language. Dispersed, isolated elders can be connected by phone to teach others the language (Taff, 1997).
Stage 7: Only adults beyond child bearing age speak the language.	Establish "Language Nests" after the Maori and Hawaiian, models where fluent older adults provide pre-school child-care where children are immersed in their indigenous language (Anonby, this volume; Fishman, 1991).
Stage 6: Some inter-generational use of language.	Develop places in community where language is encouraged, protected, and used exclusively. Encourage more young parents to speak the indigenous language in home with and around their young children.
Stage 5: Language is still very much alive and used in comunity.	Offer literacy in minority language. Promote voluntary programs in the schools and other community institutions to improve the prestige and use of the language. Use language in local government functions, especially social services. Give recognition to special local efforts through awards, etc.
Stage 4: Language is required in elementary schools.	Improve instructional methods utilizing TPR (Asher, 1996), TPR-Storytelling (Cantoni, this volume) and other immersion teaching techniques. Teach reading and writing and higher level language skills (Heredia & Francis, 1997). Develop two-way bilingual programs where appropriate where non-speaking elementary students learn the indigenous language and speakers learn a national or inter-national language. Need to develop indigenous language text-books to teach literacy and academic subject matter content.
Stage 3: Language is used in places of business and by employees in less specialized work areas.	Promote language by making it the language of work used throughout the community (Palmer, 1997). Develop vocabulary so that workers in an office could do their day-to-day work using their indigenous language (Anonby, this volume)
Stage 2: Language is used by local govern-and in the mass media in the minority community.	Promote use of written form of language for government and business dealings/records. Promote indigenous language newsletters, newspapers, radio stations, and television stations.
Stage 1: Some language use by higher levels of government and in higher education.	Teach tribal college subject matter classes in the language. Develop an indigenous language oral and written literature through dramatic presentations and publications. Give tribal/ national awards for indigenous language publications and other notable efforts to promote indigenous languages.

Language Network through the "Language Apprentice" approach is actually passing on endangered California Indian languages to young adults who have both the stamina to teach young children and who can be trained in teaching methods appropriate for schools. Linguist Leanne Hinton has written extensively about the Language Apprentice methods both in columns in *News From Native California* and her book *Flutes of Fire: Essays on California Indian Languages*. As well as describing methods, she discusses in her writings the beauty of indigenous languages. Her recommendations to teachers and learners of Indian languages in Figure 2 are especially useful. Another approach to the lack of speakers at Stage 8 is the Indiana University Model described in this volume that utilizes computer-assisted instruction to make up for the lack of speakers.

Some tribes still have many fluent elders, but most, if not all, the native language speakers are beyond their childbearing years. Fishman describes this situation as his **stage seven**. While often lacking training in teaching methods appropriate for large groups of older children, these older adults can teach their grandchildren their language as demonstrated in the highly successful "language nests" of New Zealand and Hawai'i described by Stan Anonby in this volume. These elders can care for young children in preschool settings and immerse them in their language. Elders can also team up with certified teachers who can help control students in the classroom and suggest second language teaching methods while they learn the language along with the children. Parents are also asked to learn the language along with their children. Anonby also describes week-long retreats where participants voluntarily pledge to use no English.

In Fishman's **stage six** there is still some intergenerational use of languages in the homes. Here parents need to be encouraged to use the language and make places in the community where children can use the language. These places can be community centers, schools, churches, and so forth. It is important to give the language prestige so that the children learning the language will keep speaking it through their teenage years until they become parents and can pass it on to their children. Creating a published written literature of poems, plays, and stories is one way to give a language prestige. Also it is helpful to have government officials, athletes, and other well-known community members use the language.

In **stage five** the language is still very alive and used in minority communities, and even on a voluntary basis in schools. Frank Smith (1988) in his book *Joining the Literacy Club* focuses on the importance of getting children to see that literacy is something for them and needs to be a part of their identity. Similarly, for language revival efforts to be successful, children need to feel that it is "their" indigenous language and that speaking the language makes them a member of an important and worthwhile group. As with any "club," there needs to be interesting and important projects and activities for the children to do.

Historically, school-based second language teaching has not led to widespread "communicative competency" (the ability to carry on a sustained conversation) in the new language for most students. It is extremely important to use language teaching methods in schools that will prepare and encourage students to use the language they are learning outside of school. Reyhner and

Figure 2. Eight Points of Language Learning (From Leanne Hinton, *Flutes of Fire*. Berkeley CA: Heyday Books, 1994, pp. 243-244, Used by Permission)

Teachers	Apprentices
1. Be an active teacher. Find things to talk about. Create situations or find something in any situation to talk about. Tell stories. Use the language to tell the apprentice to do things. Encourage conversation.	**1. Be an active learner.** Ask about things. Create situations, bring things to ask your teacher to tell you about; find things in the environment to ask about; ask him/her to tell you stories.
2. Don't use English, not even to translate.	**2. Don't use English**, not even when you can't say it in the language. Find other ways to communicate what you want to say.
3. Use gestures, context, objects, actions to help the apprentice understand what you are saying.	**3. Use gestures, context, objects, actions** to help in your communication when you don't know the words.
4. Rephrase for successful communication. Rephrase things the apprentice doesn't understand, using simpler ways to say them.	**4. Practice.** Use new words and new sentences and grammar as much as possible, to yourself, to your teacher, to other people.
5. Rephrase for added learning. Rephrase things the apprentice says to show him correct forms or extend his knowledge to more complex forms. Encourage communication in the language, even with errors.	**5. Don't be afraid of mistakes.** If you don't know how to say something right, say it wrong. Use whatever words you know; use gestures, etc. for the rest.
6. Be willing to play with language. Fantasize together; make up plays, poems, and word games together.	**6. Be willing to play with language** like children do. Name things you see, count them, talk about what color they are. Make up stories.
7. Understanding precedes speaking. Use various ways to increase and test understanding. Give the apprentice commands to follow. Ask him/her questions. It is not necessary to focus on speaking each new word right away; that will come naturally.	**7. Understanding precedes speaking.** You may recognize and understand many things you cannot say. Focus on understanding; that is the most important step toward language learning. After you understand an utterance fully, learning to speak it will not take long.
8. Be patient. An apprentice won't learn something in one lesson. Repeat words and phrases often, in as many different situations and conversations as possible.	**8. Be patient with yourself.** It takes a long time to learn a language well. You are doing a heroic task; forgive mistakes.

Tennant (1996) draw from the work of Krashen, Lozanov, and Berlitz five principles that need addressing, with varying degrees of emphasis, in effective language-teaching programs: 1) Putting primary emphasis on *communication*, not grammar, 2) Using *context* that is real or at least realistic, 3) Processing *content* of high interest to the learner, 4) Adjusting the pace of instruction to the students' progress, including moving from simple to complex (generally speaking), emphasizing speaking over speaking correctly, and putting comprehension before completion, and finally 5) Correcting students through modeling.

According to Fishman, moving a severely endangered language from stage 8 to stage 5 is the minimal prerequisite for keeping it alive, and this effort does not require the dominant English-speaking group's cooperation. Stages four through one involve giving the minority language a legal status, including minority language use in schools, workplaces, and government. This has been accomplished in principle through the rhetoric of the Native American Languages Act of 1990 and policy statements passed by some tribes in the United States. However, making the rhetoric a reality is another issue, and efforts for real change can bring right wing political reactions.

In Fishman's **stage four**, the minority language is required in elementary schools, and it is important to teach "academic" subject matter in it rather than just teaching it as a second language. The success of the Rock Point Community School in the Navajo Nation, which has had bilingual education for almost thirty years, is a good example of what can be done in schools to build on home and community language preservation efforts. At Rock Point two-thirds of the kindergarten time and one-half of the time in grades one through three were Navajo immersion with academic content taught in Navajo. In grades four through twelve, from one-fifth to one-fourth of class time was taught in Navajo (Holm & Holm, 1995; Reyhner, 1990).

In **stage three** the indigenous language is used among employees (but not by supervisors). Historically, it has been very difficult, because of bureaucratic red tape required both by the Bureau of Indian Affairs and tribes, for local people to get small business started on Indian reservations in the United States. Making businesses as easy to open in Indian Nations as outside of Indian country would both keep more income in the Nations and would create new environments for native language use. At the 1997 symposium Scott Palmer spoke about the importance of using indigenous languages in a work environment. He theorized that the language of the work environment would ultimately determine the language of the home as parents sought economic opportunity for their children.

Fishman emphasizes the need to use the indigenous language to give adults useful information on a variety of topics. For example, he discussed a bilingual book, *Social Work and the Welsh Language*, about "using Welsh in job training, job retraining, health counseling, literacy efforts, school transition, helping kids go from elementary to high school, bereavement counseling, building happy peer group ties, and vocational planning" in his 1995 symposium keynote speech. Using material such as this, indigenous language activists can provide valuable needed service to their community as they work to revive their language.

In **stage two** lower government services and mass media use the language. Literacy efforts that would halt the "special diglossia" that Daniel McLaughlin (1992) describes where tribal government officials speak the tribal language but keep all records in English would add prestige to tribal languages. Tribal colleges can do a lot both to promote indigenous language reading and writing skills and can also target their educational programs to the actual local occupational needs of their particular Indian nation. A good example of this job targeting can be found at Salish Kootenai College in Montana. If college educated supervisors use the language, other workers will also be encouraged to use it.

In **stage one**, higher levels of government and education use the language. The tribal college movement begun in 1968 in the United States with the founding of Navajo Community College, now known as Diné College, is one of the most promising events in Indian country. This movement has grown till in 1999 the American Indian Higher Education Consortium (AIHEC) listed 31 college, institute, and university members. Recently, Sinte Gleska University, Oglala Lakota College, Diné College, and Haskell Indian Nations University started four-year teacher-education programs. Except for Haskell, an intertribal college, tribal language and culture requirements are integral to these teacher education programs. Non-tribal colleges and universities near Indian Nations have also been increasing their offerings of tribal languages and sometimes offer bilingual teacher training programs (Reyhner, Lockard, & Rosenthal, in press). For example, Northern Arizona University (NAU) for Fall 1999 offered five sections of First Year Navajo and one section each of Second Year Navajo, Intermediate Conversation, Navajo for Native speakers, and Navajo Culture and Civilization. NAU also offers a Master of Education (M.Ed.) degree in Bilingual Multicultural Education that can lead to a bilingual endorsement on a basic teaching certificate from the Arizona Department of Education.

Fishman's conclusions

Fishman notes how the emphasis on individual rights in modern western democracies detracts from the recognition of minority group rights. He writes,

> The denial of cultural rights to minorities is as disruptive of the moral fabric of mainstream society as is the denial of civil rights. Civil rights, however, are focused on the individual, while cultural rights must focus on ethnocultural groups. Such groups have no recognized legal standing in many Western democracies where both establishment capitalist thought and anti-establishment Marxist thought prophesies the eclipse of culturally distinct formations and the arrival of a uniformized, all-inclusive "modern proletarian" culture. (1991, p. 70)

Fishman defends the need to recognize "cultural democracy" as a part of general democracy and to see efforts to preserve and restore minority languages as societal reform efforts that can lead to the appreciation of the beauty and distinctiveness of other cultures as well. He emphasizes that efforts to restore minority

languages should be voluntary and "facilitating and enabling" rather than "compulsory and punitive" and that bilingualism should be viewed as life enriching and a bridge to other cultures (1991, p. 82). In this Fishman echoes smaller studies such as Colin Baker's (1988) review of compulsory and voluntary efforts to revive Celtic languages in the British Isles.

Important factors Fishman finds in successful efforts to maintain minority languages include the need for sacrifice, self-help, self-regulation, and the establishment of boundaries. He logically locates the key to minority language preservation in the intergenerational transmission of the language in the home by families, not in government policies and laws. He writes, "The road to societal death is paved by language activity that is not focused on intergenerational continuity" (1991, p. 91). He cautions against putting too much effort and reliance on native language media, schools, and governmental efforts. An indigenous language radio station or policy statements such as those found in the Native American Languages Act of 1990 can make for a friendlier environment for minority languages, but they are no substitute for grassroots efforts focused on using indigenous language in homes and at community social occasions.

Outside of homes, minority language use in early childhood centers, such as the Maori and Hawaiian language nests described by Stan Anonby in this volume, and in pre- and post-natal programs for young mothers is important. In the community, minority language use can also be in cooperative markets, employment centers, recreational centers, legal aid services, credit unions, and so forth. Fishman also points out the need for teachers who teach "academic" subject matter in the home language and who are tolerant and accepting of different dialects. Fishman asserts, "it doesn't pay to force a written standard, much less a spoken one, on an adamantly unwilling or seriously ailing speech community" (1991, p. 345). Lastly, social boundaries must be developed that give minority languages an exclusive role in traditional family and community social activities.

The point Fishman comes back to time and again in his writings is the same issue of the social costs of minority "language-in-culture" loss brought up by Lilly Wong Fillmore (1991) in her article "When Learning a Second Language Means Losing the First." These social costs include alcoholism, drug abuse, dysfunctional families, child abuse, and the like, and they are documented extensively in the literature on indigenous peoples. For example, Oglala/Lakota American Indian Movement leader and movie actor Russell Means (1995) in his autobiography *Where White Men Fear to Tread* chronicles indigenous cultural disintegration and the resulting bar hopping, drinking parties, and drug use that have led to car accidents, alcoholism, and premature deaths of many Indians. He also describes attempts to revive traditional cultural values. The disintegration of "American culture," especially among youth, is decried by political conservatives in the ongoing "family values" debates in the United States, but they usually fail to link this crisis with their English-only political agenda and the social costs of forced assimilation.

A discussion follows of where efforts need to go in terms of further developing children's Native language competencies, including reading and writing,

once children begin speaking their Native language so that they can have full access to the traditional knowledge of their Native culture. This discussion is followed by a brief discussion of the role of new computer technology in language revitalization and what kind of teacher training is needed to allow schools to be successful partners in language revitalization efforts.

The role of writing in the indigenous language hierarchy of needs

American Indians and other indigenous peoples, based on the history of colonization, are often deeply suspicious of all things associated with European and other colonizers. The fact that Christian missionaries were often the first to develop writing systems for indigenous languages in order to translate their Bible and convert Natives from their traditional religions makes reading and writing indigenous languages especially problematic. In addition, in the hierarchy of needs, reading and writing can wait, because many children cannot even speak their ancestral languages. However, in cases such as at Rock Point Community School, where many students still come to school speaking Navajo, Native language literacy is less controversial, especially when Navajo is used to read and write about local events, issues, and needs. Brian Bielenberg discusses in this volume the concerns some American Indians have about indigenous language literacy. The concern that writing will change the language is real, but as Richard Littlebear and Stephen Greymorning discuss in their papers in this volume, languages should be living, not fixed in time and thus dead. Perhaps, with the knowledge of the possibilities for change that writing can produce, traditionalists can exert some control over those changes to preserve what they hold dear while taking steps to allow there language to be more viable in a modern, technological society. H. Russell Bernard puts the case for literacy forcefully:

> For those linguists who want to help preserve language diversity, there are, in my view, two best things to do. One is to help native people develop more language-nest programs.... The other is to help native people develop publishing houses.
>
> I want to make clear that I am talking about real publishing of books that are sold on an aggressively sought market. And I want to make equally clear that bilingual education and teaching people to write their previously nonliterary languages is not, by itself, a solution. (1997, pp. 143-144)

American Indian communities have a hierarchy of needs based on the current health of the language. Communities with the direst needs are those where only a few speakers are left, and they are all very old. In fact, at the 1998 conference of the American Association for Applied Linguistics in Seattle, Natasha Warner, one of Leanne Hinton's graduate students, described working with a family in California who wanted to learn their ancestral language and there were no speakers left, only the records of missionaries and linguists. Documentation (see Parks, et al., this volume) and conversational proficiency are critical for the

most endangered languages. Once children achieve conversational proficiency at home, in language nests, in schools, or elsewhere, then there is a need to expand that proficiency into more sophisticated realms so that they can discuss abstract higher-level topics. Since schools are about literacy, one could argue that to do anything with indigenous languages in schools presupposes promoting indigenous language literacy—that literacy is part of the evolution of languages that are going to survive in the modern world. Scott Palmer (1997) emphasized at the 1997 symposium the role of the language of the workplace in the survival of indigenous languages, and stopping at conversational proficiency implies that those speaking indigenous languages in the workplace will be relegated to lower paying jobs that do not require literacy. The papers by Ruth Bennett and her associates and Gina Cantoni in this volume discuss how language teachers can continue to develop their students' language skills, including writing skills, once students have achieved a beginning conversational proficiency.

At the conversational level textbooks are not needed, just teacher training and teacher guides, but at the higher levels textbooks need to be developed, first like the ones that Willem de Reuse and Bernadine Adley-SantaMaria described at the 1997 symposium, and then others that teach the history and culture of the group. Such textbooks exist in English for at least some tribes today, but those written in indigenous languages, especially those written for children, are practically nonexistent. A limited example of content area indigenous language teaching material was described by Delores Jacobs in her presentation at the 1997 symposium on the "Science Explorers Translation Project," which dealt with developing curriculum on Hantivirus disease prevention for Navajos.

Depending on how strong an indigenous language is, different intervention strategies are needed to revitalize the language. Ideally, children should pick up conversational proficiency in their ancestral language at home before they ever reach school and if not at home, in language nests. If that goal is reached, then schools can build on this success by teaching students to read and write the language so they then can use it as the language of instruction for mathematics, science, social studies, and all the other subjects taught in schools. Literacy can also expand the environments for indigenous language use beyond schools to letters, e-mail, signs, newspapers, magazines, books, government documents, and all the other venues of literacy. Literacy would avoid the anomaly of Navajos speaking their language in their tribal council and on their radio station but writing their council minutes and radio scripts in English (McLaughlin, 1991).

Primary and secondary discourse

Mark Fettes at the 1997 symposium spoke about the three interwoven braids of language renewal, and in the process talked about primary and secondary discourse. For academic success students need to expand their language skills from primary discourse to secondary discourse. Conversational proficiency in an indigenous language is great, but it is useful only in contextualized face-to-face situations [the model for this is Asher's (1996) TPR] and does not lead by

itself to proficiency in decontextualized situations that abound in school work, especially beginning about fourth grade. However, the use of TPR-Storytelling that Gina Cantoni writes about in this volume can move students into the realm of secondary discourse, especially if students begin to write scripts for their storytelling.

Primary discourse is associated with face-to-face conversational interaction among members of a speech community while secondary discourse is more abstract and is needed when dealing with strangers who do not have a set of closely shared experiences and understandings from which to interpret what is being said (see Figure 3 below). Secondary discourse has also been associated with dependent clauses that add additional information to speaking and writing, but which also require more language sophistication to understand and use. It can be argued that it is around fourth grade where language use in classrooms, especially in textbooks and lectures, shifts from the language one finds in everyday conversational speech to a school language that is not generally used in a community for day-to-day activities. Students who do not develop academic language skills cannot handle the type of textbook-oriented instruction that predominates in the higher grades in schools. Armando Heredia and Norbert Francis suggested at the 1997 symposium that one way to help students enlarge their language competencies to include secondary as well as primary discourse is through the use of written versions of traditional stories.

Figure 3. Categorization of Language Skills Required in Different Settings

Family/Neighborhood	School/Larger Society
Primary Discourse	Secondary Discourse
Mostly Face-to-Face	Often at a Distance
Contextualized Language	Decontextualized Language
Context Embedded	Context Reduced
Conversational Proficiency	Academic Language Proficiency
Concrete/Surface Meaning	Abstract/Deeper Meaning
2-Way Dialogue	1-Way Lecture/Textbook
Indian English	Standard English

The role of technology in revitalizing indigenous languages

The final section in this volume is on the uses of technology in indigenous language revitalization efforts. There has been telling criticism of "technofixes" for endangered languages. Hilaire Paul Valiquette writes that,

> Computers are the most questionable of language teaching tools. They are not cost-effective; they bypass intergenerational teaching; they often involve handing over control to technical experts. They are very often connected with bad L[anguage] teaching (word lists, clicking on the face to hear the word 'nose,' etc.). Their use makes a patronizing

> statement: "the superiority of technology of the dominant culture is saving you." (1998, p. 111)

However given that, he goes on to write, "Computers do have a use in long-range language preservation" (1998, p. 111).

The first paper in this section by Mizuki Miyashita and Laura Moll describing a dictionary project is a good example of using technology to inexpensively aid both language documentation and to make that information more accessible to indigenous language learners. The second paper by Amar Almasude focuses on how cassette tape recorders and other new technologies have allowed an oral culture to be maintained and diffused both within Morocco and among emigrants abroad. The last paper by Robert St. Clair and his colleagues gives useful information to anyone interested in publishing indigenous language materials.

Teaching and supporting indigenous languages

Anyone studying the issue knows how threatened indigenous languages are everywhere in the world despite the rhetoric of tribal policies and the Native American Languages Act in the United States and similar efforts abroad, such as the 1992 Sámi Language Act in Norway (Corson, 1995). However, this volume emphasizes the positive steps being taken to effectively revitalize indigenous languages so that Native people who wish to keep their languages alive can get some guidance from the efforts currently being made around the world. And I want to emphasize that these efforts supporting indigenous languages indicate that children can learn an international language such as English along with their indigenous language. English does not have to be purchased at the price of losing one's indigenous language.

However, if we are to get beyond teaching students numbers, colors, and names of animals, teacher education will be critical in regard to school programs designed to revitalize indigenous languages. There is a large body of experience with second language teaching that can inform teachers of indigenous languages. In particular, Joyce Silverthorne, a member of the Montana State Board of Education, dealt at the 1997 symposium with the broad overview of education required for a professional indigenous language teacher. An excellent inservice teacher training model for promoting indigenous language preservation and teaching that incorporates modern research on second language acquisition is described in appendix of *Stabilizing Indigenous Languages* (Cantoni, 1996, pp. 234-239). Developed by Richard Littlebear and the staff of the Interface Alaska Bilingual Multifunctional Resource Center, the model stresses the importance of the use of the Total Physical Response (TPR) and "Natural" approaches to language learning for beginning language instruction. The model also discusses the importance of attitudes towards language, building a theoretical base, building a rationale for language preservation, classroom teaching methods, practical applications, and follow-up to training. Immersion teaching methods, such as Greymorning describes in this volume, are most conducive to developing communicative competence, but they require fluent teachers who are

not always available. Teresa McCarty and her colleagues described at the 1997 symposium an intensive summer training program for teachers of indigenous languages, and Cantoni and Reyhner (1998) summarized what educators can do to help with indigenous language revitalization.

Steve Greymorning's 1997 symposium presentation on "Going Beyond Words" and his paper in this volume describe various efforts to teach Arapaho to school children, which had more and more success as the teachers were taught various immersion language teaching methods and spent more classroom time using them to teach Arapaho, but he concludes by advocating the Maori "philosophy of language from the breast," which emphasizes intergenerational language transmission in the home. The Maori have started language classes for mothers with children 16 to 24 months old. Mothers learn Maori while their babies also learn the sounds and cadences of their tribal language. Veronica Carpenter described at the 1997 symposium how young children pick up the sounds and rhythms of the language(s) spoken around them and how older children not so exposed to their tribe's language need specific help to pick up that sound system they did not learn at their mother's breast.

It is well known that infants who are breast fed pick up immunities from childhood diseases from their mother's milk, and I maintain that children who learn their indigenous language and culture at their mother's breast pick up immunities from the diseases of modern life that lead our children to joining youth gangs, abusing drugs and alcohol, and becoming members of the rootless consumer society described by Robert N. St. Clair in his talk on "The Invisible Doors Between Cultures" at the 1997 symposium. The message about the values of indigenous languages and cultures that I found on the Iñupiaq wallet card I received in Anchorage at the Third Annual Stabilizing Indigenous Languages Symposium needs to be a part of any indigenous language revitalization effort. Whichever of Fishman's stages an indigenous language is in, there is a need to convince people, indigenous and non-indigenous, that keeping the language alive is important. This need for "marketing" indigenous languages was described at the 1997 symposium in regard to the Maori of Aeotora/New Zealand by Rangi Nicholson.

Conclusion

Indigenous language activists first need to determine the current status of their language and then set realistic goals for their language revitalization efforts. Irregardless of whether these goals include literacy, once goals are established, language activists need to concentrate on the **methods**, **materials**, and **motivation** they will use to achieve their goals, what I term the **three "M's"** of indigenous language education (see Figure 4). It is these **three "M's"** that will either lead indigenous language learners to communicative competence and more sophisticated language usage or to failure.

No one person, community, school, university, tribe, or government program has all the answers to keeping any indigenous language alive. It is only through sharing successes and learning from failures that the extinction of in-

digenous languages can be prevented. More needs to be done to create a network of information sharing between indigenous communities. The five symposiums and associated publications, including this volume, *Revitalizing Indigenous Languages*, are among the many attempts to get the word out about the importance and value of indigenous languages, the current peril they are in, and what can be done to revitalize them.

Figure 4: The Three "M's" of Indigenous Language Education

Methods deal with what teaching techniques will be used at what age levels and stages of language loss. **M**aterials deal with what things will be available for teachers and learners to use, including audiotapes, videotapes, storybooks, dictionaries, grammars, textbooks, and computer software. **M**otivation deals with increasing the prestige (including giving recognition and awards to individuals and groups who make special efforts) and usefulness of the indigenous language in the community and using teaching methods that learners enjoy so they will come back for more indigenous language instruction.

I do not argue for keeping indigenous languages alive just for the sake of not seeing them disappear, for antiquarian reasons. Rather, I see these languages as conduits for indigenous cultures that have real value in our modern world. Students who are not being passed down their languages and cultures are often not successfully assimilating into the more positive aspects of mainstream culture. Instead, caught between two cultures without a thorough cultural foundation laid in the home, they often don't learn their tribal language or English very well and are prone to join gangs to seek the cultural identity and sense of belonging that is being denied them along with their ancestral language.

Richard Littlebear writes movingly in the first paper in this volume on how tribes already have all the signs, symbols, colors, and "turf" that today's youth are seeking when they join gangs. Gangs are an attempt by youth to gain a sense of belonging that has been denied them in a world of cultural homogenization, large impersonal schools, and mass marketing. In addition, these culturally lost children who join gangs in their search for identity are more susceptible to the allure of drugs and alcohol and learn the more negative aspects of the mainstream culture through movies, television, and popular music. In my view, indigenous language revitalization is part of a movement for spiritual renewal and healing that is badly needed both among many indigenous communities and in the world as a whole.

This revitalization of indigenous languages will not come easily. There has been a lack of sharing of information between communities about which indigenous language activities, strategies, and policies have proven effective and those that have not proven fruitful. Languages need special love, care, and protection by the communities that want to keep them alive. If indigenous languages are to

survive, it is not enough for more children and adults to learn these languages. Environments also must be created in indigenous communities where the indigenous language is used exclusively. The old saying "use it or lose it" goes for indigenous languages as well as a lot of other things. These exclusive environments could be community centers such as the Maori Culture Centers; they can be individual homes; and they can even be Christian churches.

All five of the Stabilizing Indigenous Languages symposiums have highlighted the need for community support of school-based efforts at indigenous language revitalization and the fact that it is critically important for parents to speak their indigenous language in the presence of their young children. While anyone can take up the cause of indigenous language revitalization by learning and speaking an indigenous language, programs of language revitalization at the community or wider levels have an increased chance for success if they are carefully researched in the manner described by Greymorning, Rubin, Anonby, and others in this volume. The Stabilizing Indigenous Language symposiums and the Teaching Indigenous Languages (TIL) website at http://jan.ucc.nau.edu/~jar/TIL.html are playing a part in a worldwide effort to disseminate information about ways to keep indigenous languages alive and well, so that anyone wanting to set up a language revitalization program can easily access the trials, tribulations, and successes of others who share their concerns for one or all of the indigenous languages of the world. Written versions of presentations from the five symposiums mentioned in this introduction can be found either at the TIL website or in the three published volumes of symposium proceedings.

Note: Portions of this paper were presented on July 17, 1996 in Albuquerque, New Mexico, at the World Indigenous Peoples Conference: Education and on May 16, 1998 at the Fifth Annual Stabilizing Indigenous Languages Symposium in Louisville, Kentucky.

References

Asher, J. (1996). *Learning another language through actions: The complete teacher's guidebook* (5th ed.). Los Gatos, CA: Sky Oaks Productions.

Baker, C. (1988). *Key issues in bilingualism and bilingual education.* Philadelphia: Multilingual Matters.

Bernard, H. R. (1997). Language preservation and publishing. In Nancy H. Hornberger (Ed.), *Indigenous literacies in the Americas: Language planning from the bottom up* (pp. 139-156). Berlin: Mouton de Gruyter.

Cantoni, G. (Ed.). (1996). Stabilizing *indigenous languages*. Flagstaff, AZ: Northern Arizona University.

Cantoni, G., & Reyhner, J. (1998). What educators can do to aid community efforts at indigenous language revitalization. In N. Ostler (Ed.), *Endangered languages: What role for the specialist* (pp. 33-37, Proceedings of the 2nd

FEL Conference, Edinburg, Sept. 25-27, 1998). Bath, UK: Foundation for Endangered Languages.

Corson, D. (1995). Norway's "Sámi Language Act": Emancipatory implications for the world's aboriginal peoples. *Language and Society, 24*, 493-514.

Fishman, J. A. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages*. Clevedon, UK: Multilingual Matters.

Heredia, Armando, & Francis, Norbert. (1997). Coyote as reading teacher: Oral tradition in the classroom. In J. Reyhner (Ed.), *Teaching indigenous languages* (pp. 56-76). Flagstaff: Northern Arizona University.

Hinton, L. (1994). *Flutes of fire: Essays on California Indian languages.* Berkeley, CA: Heyday Books.

Holm, A. & Holm, W. (1995). Navajo language education: Retrospect and prospects. *Bilingual Research Journal, 19*(1), 141-167).

McLaughlin, D. (1992). *When literacy empowers: Navajo language in print.* Albuquerque: University of New Mexico.

Means, R. (with M.J. Wolf). (1995). *Where white men fear to tread.* New York: St. Martin's.

Palmer, Scott. (1997). Language of work: The critical link between economic change and language shift. In J. Reyhner (Ed.), *Teaching indigenous languages* (pp. 263-286). Flagstaff: Northern Arizona University.

Reyhner, J. (Ed.). (1997). *Teaching indigenous languages*. Flagstaff: Northern Arizona University.

Reyhner, J. (1990). A description of the Rock Point Community School bilingual education program. In J. Reyhner (Ed.), *Effective language education practices and native language survival* (pp. 95-106). Choctaw, OK: Native American Language Issues.

Reyhner, J.; Lockard, L.; & Rosenthal, J. (in press). Reviving Native American languages. In J. Rosenthal (Ed.), *Handbook of undergraduate second language education: English as a second language, bilingual, and foreign language instruction for a multicultural world.* Mahwah, NJ: Lawrence Erlbaum.

Reyhner, J., & Tennant, E. (1995). Maintaining and renewing native languages. *Bilingual Research Journal, 19*, 279-304.

Smith, F. (1988). *Joining the literacy club: Further essays into education.* Portsmouth, NH: Heinemann.

Taff, A. (1997). Learning ancestral languages by telephone. In J. Reyhner (Ed.), *Teaching indigenous languages* (pp. 40-45). Flagstaff: Northern Arizona University.

Valiquette, H.P. (1998). Community, professionals, and language preservation: First things first. In N. Ostler (Ed.), *Endangered languages: What role for the specialist* (pp. 107-112, Proceedings of the 2nd FEL Conference, Edinburg, Sept. 25-27, 1998). Bath, UK: Foundation for Endangered Languages.

Wong Fillmore, L. (1991). When learning a second language means losing the first. Early *Childhood Research Quarterly, 6*, 323-346.

Some Rare and Radical Ideas for Keeping Indigenous Languages Alive[1]

Richard Littlebear

When the U.S. Government acted to silence our languages, it was acknowledging how our languages empowered and united us when we spoke them. By attempting to silence our languages, the U.S. Government was exhibiting real fear of our languages. It diligently tried to suppress the power of our languages.

But why save our languages since they now seem to have no political, economic, or global relevance? That they seem not to have this relevance is exactly the reason why we should save our languages because it is the spiritual relevance that is deeply embedded in our own languages that is important. The embeddedness of this spirituality is what makes them relevant to us as American Indians today.

When I was invited to come to Flagstaff, Arizona, to keynote the Fourth Annual Stabilizing Indigenous Languages Symposium, I challenged myself to come up with different ways to say "just speak your language" because that is really the core of my message. If we all just spoke our languages to our young people, we would have no need for indigenous language curricula or for conferences such as this one to save our languages. If we just spoke our languages, all of our languages would be healthier, but I know that is not what's happening. We do not speak our languages and our languages are dying. We are also confronted with a voracious language, English, that gobbles up everything in its way. We have to devise strategies now to face the problems that our languages have never encountered before.

Since this is the first time and only time we are going to lose our languages, we have to devise new strategies accordingly. There is no hierarchy to the rare and radical ideas I am presenting here, one is no better or worse than any of the others.

This first idea is that we have no more elders living from the previous century. That means we no longer have that linguistic and spiritual link to the previous cultures. For the Cheyenne people, we began making the changeover to a different type of culture and to a written language about a century ago. Those in my generation who speak the Cheyenne language are quite possibly the last generation able to joke in our own language. We are possibly the last ones who can talk in our language about profound physical, psychological, and spiritual topics and do it in the appropriate technical language. We can articulate how we feel physically, psychologically, and spiritually and know with satisfaction that

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[1]This paper is adapted from a speech delivered at the Fourth Annual Stabilizing Indigenous Languages Symposium in Flagstaff, Arizona, on May 2, 1997. It was not transcribed in time to be included with the other papers from that conference in *Teaching Indigenous Languages*. The editors decided to include it here so that it would not be forgotten. Copyright © 1999 by Richard Littlebear.

we have been understood. The generations that succeed us will be unable to articulate those same feelings in Cheyenne since English is now their first language. And the sad part is that even in their first language, English, they have trouble talking about the deeper meanings of life since they are not being taught English very well at school or at home.

One of the objections I have against mechanical and electronic means of teaching our languages, which are advocated by many today, is that we omit the "spice words" that enliven our languages. Linguists call these "spice words" particles. These are words that give variety and meaning to our languages. When these words are isolated, they do not stand alone because they often depend on grammatical and semantic links to whatever is being discussed. So when our people are recorded speaking their own languages, often these "spice words" are omitted and the languages become very stilted and formal.

Since we have no more elders from the previous century, we should be concentrating on our youth. We should be volunteering to help in school-based programs instead of criticizing them into oblivion. We should be doing those things that are proactive and positive that ensure the continued use of our languages.

Whenever we as American Indian people develop some curriculum materials, we tend to immediately develop a faction that opposes their use. This opposition occurs without anybody appreciating the fact that members of our own tribes locally produced these materials. Yet we will question and demolish our own home-produced materials. What makes this situation even worse is that when we get curriculum materials from outside our geographical and cultural boundaries, we don't utter a word of protest or criticism. I have had this criticism happen to me, and it is really discouraging.

A second idea is that language is the basis of sovereignty. We are always talking about sovereignty and rightfully so, because when we were dealing with the U.S. Government during the treaty era, our people were treated as nations equal in stature to the U.S. Government. It was a government to government relationship. We have all those attributes that comprise sovereign nations: a governance structure, law and order, jurisprudence, literature, a land base, spiritual and sacred practices, and that one attribute that holds all of these other attributes together: our languages. So once our languages disappear, each one of these attributes begins to fall apart until they are all gone.

For instance, land ceases to be sacred and becomes looked on as only a commodity to be bought and sold. Our land base and sacred practices are passed on through our languages, not by English, the language spoken by people who killed our people and oppressed our languages. Think about that. We are still accepting the idea that English is a superior language. The passage of time and the continuing loss of our languages separates us from our sacred references and our sacred sites. We have to refer to them constantly. We need to see that our languages continue to refer to our sacred sites. At Dull Knife Memorial College where I work, we took a field trip to Bear Butte in South Dakota's Black Hills. Bear Butte is our most sacred site. It surprised me to learn that this field trip was

the first time most of the students had ever gone to this sacred area. Many did not know the spiritual significance of Bear Butte. Another indication that we are losing our link with our land and sacred sites concerns the following. On our Reservation we have a moratorium on developing and exploiting our natural resources. This moratorium was set in place in the 1970s. However, in a recent informal survey of students in our college, most of them were for development of natural resources. This came as quite a shock to my generation.

A third idea is that of protocol in some ceremonies and the language used in those ceremonies. For instance, there are some rituals that I have never participated in on our reservation. Consequently, I am unable to participate in some activities and to use the language associated with that ritual. The dilemma is that those people who have the right to use that vocabulary and language and who have done the rituals are dying. When they die, all of this language will be lost forever. I do not have the years needed to do the rituals, and I don't want to truncate or abbreviate or shortcut any of the rituals. But I keep saying that someone should write these words down on paper and leave them for posterity. I myself do not have to hear or read what they have written. This loss of this specialized language will become a major obstacle in retaining the full richness of languages and cultures yet I do not have a solution for overcoming this protocol.

A fourth idea is that some of our people go to college and may return to us to help preserve our languages and cultures. However, when they return from college, they often are not accepted by their own people or are viewed with suspicion and skepticism. I speak from experience. I have been off my reservation and have earned a doctorate. These factors often lead to my being discounted and dismissed because some people assert that I think too much like a white person. I counter by saying "but there are 250,000,000 other people in this country who think like white people, so what is wrong with that?" For me, this suspicion and skepticism are difficult to understand. The rejection of American Indian people by their own people is almost like the rejection of formal education. I just hope that this rejection is not a rejection of learning because I do not know of any tribal group that ever rejected learning. Also, I am a product of the BIA [U.S. Bureau of Indian Affairs] educational system, and that experience has made me very suspicious of education that is assimilationist and cruel. I refer to the episodes when American Indian peoples' mouths were washed out with harsh G.I. soap whenever they spoke their own languages.

I have heard it said that you can't go home again. Well, I am back home and regardless of how much I am rejected by my own people, I am staying. If people want to argue about that I will argue, and I can do that in two languages.

A fifth radical idea is that we must inform our own elders and our fluent speakers that they must be more accepting of those people who are just now learning our languages. We must sensitize our elders and fluent speakers to the needs of potential speakers of our languages. In many of our tribes, the elders are teachers and bearers of wisdom. As a result, when they criticize or make fun of a person trying to speak one of our languages they are taken very seriously, and some people will not even try to speak the language once they have been

criticized by a respected elder of that tribe. When this happens, it hastens the death of that language. Somehow we must turn this negativity around. Do not be so over-corrective about pronunciation. We all make mistakes. I have spoken two languages all of my life, and yet I still make mistakes in both of them. I spent five years intensively studying the English language, and I still make mistakes in that language in reading, writing, and speaking. However, in spite of my mistakes, I have been successful at writing articles and speeches in the English language and some have even been published. As long as we can understand each other, we are doing all right. Understanding each other in our languages is the main criterion, not our errors in pronunciation and grammar. Later on we can work on correct pronunciation, but first let us get people talking our languages and this latter aspect is going to take time.

I teach my Cheyenne language on my reservation. I tell my student that for this semester they must learn Cheyenne with me using my inferior Cheyenne, and after they are done they can go home and speak the superior Cheyenne that abounds in their families. I say this to preempt needless discussions on what is the correct way of saying things. Understanding each other is the main criterion for using any language. As a case in point, I remember a snippet of a conversation that I exchanged with one of my Anglo students. I walked out of my office and saw him in the hallway, and I greeted him in Cheyenne. He understood me and answered me appropriately. Just that little conversation justified my efforts during the previous semester. Now we can start building on this verbal exchange. He understood me and I understood him. That was all that was needed.

In my class we do not do any reading or writing. I have to page through my lesson plans in my mind. All I am trying to do is get them to talk. Just talk. That's all I want. Words change; cultures change; social situations change. Consequently, one generation does not speak the same language as the preceding generation. Languages are living, not static. If they are static, then they are beginning to die. When I first heard young Cheyennes speaking Cheyenne a little differently from the way my generation did, I was upset. One little added glottal stop here and there and I thought my whole world was falling apart. It wasn't, and it still hasn't fallen apart. So we must welcome new speakers of our languages to our languages, especially the young ones, and recognize they will continue to shape our languages as they see fit, just as my generation and the generation before mine did.

A sixth idea concerns the fact that even in our rural areas, we are encountering gangs. Our youth are apparently looking to urban gangs for those things that will give them a sense of identity, importance, and belongingness. It would be so nice if they would but look to our own tribal characteristics because we already have all the things that our youth are apparently looking for and finding in socially destructive gangs. We have all the characteristics in our tribal structures that will reaffirm the identities of our youth. Gangs have distinctive colors, clothes, music, heroes, symbols, rituals, and "turf" (our reservations). We American Indian tribes have these too. We have distinctive colors, clothes, music, heroes, symbols, and rituals, and we need to teach our children about the positive as-

pects of American Indian life at an early age so they know who they are. Perhaps in this way we can inoculate them against the disease of gangs. Another characteristic that really makes a gang distinctive is the language they speak. If we could transfer the young people's loyalty back to our own tribes and families, we could restore the frayed social fabric of our reservations. We need to make our children see our languages and cultures as viable and just as valuable as anything they see on television, movies, or videos.

My last idea is that we must remember that our children are not genetically wired for learning and acquiring our tribal languages. This means that just because our children are born to Cheyenne parents on Cheyenne land and engage in Cheyenne traditional practices does not mean they are automatically predisposed to learning the Cheyenne language. They have to be taught our language. They must learn to speak the Cheyenne language in just the same way they would have to go about acquiring Greek or German or Swahili, especially since for almost all of them English is now their first language. Everybody who works with languages should learn about second language acquisition and the theories buttressing it and be able to apply those theories in whatever subject area they are teaching. Teachers of American Indian languages must remember that everybody has to go through some definite stages of acquiring a language. Right now we have children who are mute in our languages, who are migrants to our languages, who are like extra-terrestrials to our cultures. We have youth who are aliens to us because they do not have the vital linguistic link that identifies them as Cheyenne or whatever tribal group they belong to.

Now, some of these ideas may not be so radical, may not be so rare, but if we can act on them, I think our language preservation programs will be much better off.

In closing I want to relate an experience I had in Alaska. I met Marie Smith, who is the last speaker on earth of the Eyak language. It was truly a profoundly moving experience for me. We talked for about three hours. I felt that I was sitting in the presence of a whole universe of knowledge that could be gone in one last breath. That's how fragile that linguistic universe seemed. It was really difficult for me to stop talking to her because I wanted to remember every moment of our encounter.

Because of that experience, I do not want any more of our languages to have that experience of having that one last speaker. I want all of our languages to last forever, to always be around to nurture our children, to bolster their identities, to perpetuate our cultures.

The Cheyenne language is my language. English is also my language. Yet it is Cheyenne I want to use when my time is completed here on this earth and I journey on to the spirit world. I want to greet in our Cheyenne language those who've journeyed on before me because I know that Cheyenne is the only language they know, the only language they ever needed to know. And I hope when I meet them on the other side that they will understand me and accept me. Thank you for listening to me.

Hena'haanehe.

Running the Gauntlet of an Indigenous Language Program

Stephen Greymorning

Neneeninoo Neniice'ooke 'oh Hinono'einiihi' nenee'eesi'inoo Ceebih'ohut Heeyei Ceciniihi' Neniice'ooke' noh hii3owoo3oowunoo 3oowoo3eeniteeno' henetioxkooni hiteenetiitoonino' heetnoo'oo3oo' hinenteeniit. Henee3neeneexu3ecoonoo henetiino'oox heteenetiitoonin heetneihoowuni kohkou'i3ecoon hinono'einiihi'. Henetiino'oox heteenetiitoonin heetheenetiino' nenei3owoo'oono' noh heetneenetino' hookoh hetiine'tiitoonin nene' heteenetiitoonin, noh nene' heteenetiitoonin tenei'oo'neino'.

I am Stephen Greymorning but in the Arapaho way I am called Hawk-flies-by-in-the-Winter-Greymorning, and I believe if Indians lose their language it will be bad for all people. I am really worried if we lose our language we won't be able to think in the Arapaho way. If we lose our language we will lose our ceremonies and ourselves because our life is our language, and it is our language that makes us strong.

For centuries our languages have been a reflection of those cultural distinctions that have made us who we are as a people, and in a sense have been an element of the many things that have made us strong. Though we have survived centuries of contact and conflict, today we are faced with a crisis that is perhaps more significant than any we have ever faced in our histories. It is a crisis of the loss of our languages, and this crisis has reached a point that if we are not able to effectively pass our languages on to our youth, within the next 15 years we could witness the loss of as much as 85% of the Indian languages that are still presently spoken. We are in effect running a gauntlet.

Many people are familiar with the gauntlet owing to how it has been portrayed in movies. It is the scene where the hero is caught by the Indians and forced to run the gauntlet. The entire village had formed two lines through which the hero had to run as he dodged tomahawks and clubs swung at him. Though he often fell, his courage carried him through. The language work that we do often faces similar trials and obstacles that threaten to beat our efforts down. It can be brutal, and like running a gauntlet our efforts demand fortitude and perseverance if we are to achieve our end objectives. Since the situation and obstacles faced on the Wind River Reservation may be very similar to those faced by many tribes, I will speak primarily from my experiences there. Later on, however, I will suggest things that may be useful toward getting through the gauntlets we face in our language efforts.

It is ironic that we often create our own gauntlets, like the books and curriculum materials that have been created by Arapaho language instructors at language teacher training workshops. Despite the fact that the materials produced represent excellent tools for language learning, they unfortunately have

also presented a problem. The problem has been that once completed they have not been put to use. Instead they have sat on shelves collecting dust. Why this has happened is not always clear. Even though language instructors received training in how they could be used and the materials were not too advanced for student use, the very instructors who created the material resisted using them. It is worth noting that as a result of having seen similar occurrences at other Indian communities, I am hopeful that my writing of the language restoration efforts at Wind River may benefit others involved in the work of language revitalization.

During the 1960s many community Elders on the Wind River Reservation had become very concerned that Arapaho youth were not able to speak the language. Their concern gave rise to continued pressure to formally implement Arapaho language instruction. Thanks to their efforts Arapaho language instruction was finally introduced within the public school system located on the reservation during the latter part of the 1970s. By 1984 Arapaho was being taught from kindergarten to grade 12. Language instruction was conducted for 15 minutes a day each day of the school week. While it is not clear why only 15 minutes a day was devoted to language instruction, it is clear that this 15 minute format represents a standard time period allotted to the instruction of our languages on most reservations throughout the United States and Canada. What has been overlooked by many, however, is what this time format represents.

I do not believe Wyoming Indian School administrators had formally assessed the impact that 15 minutes of language instruction could have on teaching Arapaho. If they did they never openly discussed it until I began questioning its effectiveness in 1993. One of the more observable impacts was the way in which our language teachers were categorized by the standard classroom teachers. I do not believe these standard classroom teachers actually thought about how little time 15 minutes represented when it came to teaching Arapaho. When I presented the idea of increasing the time devoted to language instruction by taking away the time used to teach other classroom subjects I was looked at as if I had gone crazy. When I continued to press the issue I was finally told, as if I were a child attending the elementary school, that if that were to happen the standard classroom teachers would not be able to effectively teach their subject areas to their students. With administrators now backed into a corner I asked; "Then why are you requiring our language instructors to teach under a format that you have expressed is ineffective?" I further explained that 15 minutes a day, multiplied by 180 days in the school year, equals 45 hours of language instruction per year. I made it clear that they have expected our language instructors to teach, and students to learn, a language in 45 hours; the amount of time many administrators usually devoted to their jobs in one week. I continued pressing the issue and asked what they thought could be accomplished if when hired they were informed that over the course of the school year only 45 hours of instruction, per subject, could be spent teaching students. For some 15 years our language instructors have had to contend with this gauntlet, and under this format language instructors readily observe that children were not learning much of the language. Faced with criticism from standard classroom teachers, who

were quick to point out how ineffective Arapaho language instruction was, Arapaho language instructors, faced with having to justify their own existence in the classroom, focused their efforts on teaching vocabulary words that mostly consisted of animals, colors, counting, and several elementary commands and phrases.

During the time when language instruction was first introduced in the schools, efforts were made to record Elders telling stories in Arapaho. By the time the tape recorder gave way to video recordings, volumes of language resource materials had already been developed. In 1981, I assisted Dr. Salzmann in compiling an *Analytical Bibliography of Sources Concerning the Arapaho Indians* and a *Dictionary of Contemporary Arapaho Usage*. Dr. Salzmann was called upon again in 1986 when he assisted in developing six hours of videotaped language lessons, 36 individual lessons in all, none of which were ever put to use. Also during that year, summer language camps were developed and run and though these camps were well attended, they had little effect in helping to produce new language speakers. Even though Arapaho language efforts had intensified, these efforts had little impact because the material developed was never effectively used. Instead, it all just sat on shelves in the Curriculum Resource Center, adding to the ranks of our gauntlet. Another problem with our language efforts resulted from taping Arapaho speakers but never translating what was said into English. The result of this oversight is that these video and audio cassette tapes can only be useful as long as fluent speakers are around who can understand what was said. At the point no more speakers exist, then no one will be able to use these resources because they will not be able to understand their content. Efforts were again intensified through summer language camps and High Intensity Language Training (H.I.L.T) workshops, which all teaching personnel were required to take part in. Even in the face of these efforts, little change occurred.

At the time many fluent speakers were facing the reality of the language slowly dying out, I was directing the language/culture program for Wyoming Indian Public School District #14. Although my basic strategy was to try and bring about changes that would strengthen how language was being taught within the school system, the battle cry from local administrators was for me to develop curriculum, curriculum, and more curriculum, believing this to be the definitive answer to the problem. While directing the program I began to realize that those who would labor to live by the rule of curriculum could also perish by the same rule. In spite of bringing a new face into the system and the volumes of material that resulted from that curriculum mandate, the rule of curriculum development had remained unchanged. We were in fact still running a gauntlet, and no matter how hard we tried our language continued to get beaten down.

When facing a gauntlet there can be but one objective: get through it. This means one has to always be one step ahead of any obstacle that might cause the language to falter or fail. This also means that individual language instructors should possess clear vision and flexibility while working with language students. They should be cognizant of situations that could impede student language development and innovatively apply the necessary actions to always keep

both students and their language program moving ahead. Perhaps equally as important, language instructors should be steadfast in their commitment toward the language program and the all-important goal of producing genuinely fluent speakers. In the case of language learning, this means to always move toward increasing the language speaking ability of each group that follows until the goal of language fluency has been achieved and maintained throughout successive generations. I believe that when I started to direct the language project on the Wind River Reservation I had been imbibed with how to move toward this goal, so I would like to share what helped me to put a language revitalization methodology in place.

When thinking about what brought me back to the language I always remember a talk I had with an Elder. He shared with me what it was like being Arapaho when he was young, and his telling me of that time took on a very personal meaning for me. One of the things he told me about was how people came together to listen to traditional stories. When people wanted to hear stories an individual or family would call on an Elder. In doing so they would first feed the Elder. When the time came to hear the stories, families would come together at night to listen. As the stories unfolded the Elder would at times call out a child's name. If the child was awake the child would respond. If the child was dozing, I was told how another child would nudge or poke their friend to wake him up enough to respond so the story could continue. If it got to the point where the Elder called out a child's name and the child did not respond, the Elder would state; "Well everyone must be tired so I will go now." Well it did not matter how often the stories were told, everyone always wanted to hear them so the children would always try to keep each other awake so they could respond when the Elder called their name.

When I first heard this story I thought back to a student demonstration that occurred when I was in college. We had gathered at a rally where a number of students were voicing their concern. At some point someone turned and asked me what I was doing for Indian people; it was as if an Elder had called my name. I remember getting up and going to the library. I just started looking through books, not really knowing what I was looking for. One of the books that came to me presented information about the status of Indian languages. At that point in time Arapaho as well as many other Indian languages were reported as being healthy with significant speaking populations. Eight years later, by the time I started graduate school, many of those same Indian languages were reported to be in serious decline. Throughout those graduate school years something drove me to enroll in every linguistic course offered and to think about strategies for language preservation.

When I started my position in the Wyoming Indian School system in January of 1993, Arapaho language classes at the elementary school level were still averaging only 15 minutes per class. At the junior high and high school levels, Arapaho was offered as 50 minute classes three times a week. Once students reached high school, however, Arapaho was optional, and the enrollment in these classes usually averaged about six students. It was obvious that after 12

years of having Arapaho classes being taught, students at best could only speak a few phrases. After years of noting this, teachers of the standard subjects saw little value in teaching Arapaho. Sadly no one seemed to concern themselves with trying to understand why the language was failing in the classroom. As a result, many had resigned themselves to believe that the language belonged in the home and not in the classroom. The problem with this outlook was that in many homes the language had been lost three generations back, and in a vast majority of homes no one could speak the language. Even in homes where speakers lived, it was discovered that fluent speakers spent on an average as much as 96% of each day both speaking and thinking in English. Clearly, if the language was meant to be in the home then a way had to be found to bring it back there.

One of the resources developed to try and accomplish this was the translation and distribution of the video Bambi in the Arapaho language. Bambi seemed like a good project for a number of reasons. One reason was that in many of our traditional stories animals and people spoke alike, so a movie like Bambi seemed to conform to some of our legends. A second reason was that as the story unfolded, its main character, Bambi, used simple childlike language as he learned to speak. Third, and perhaps most importantly, it was a story that most children on the reservation were already both familiar with and enjoyed to watch. The idea was that by developing a library of children videos, like the Bambi video, both children and adults could begin to pick up a lot of Arapaho. This became a part of what I called a multifaceted approach. This means that efforts should be taken to have the language seen and heard in as many places as possible, like on street signs, the radio, computers, videos, and books. Some of those early efforts produced audio cassettes of children's songs and stories that children could sing to or read along with, animated computerized children stories, and a prototype for a talking dictionary with word phrases that linked to animated recreations of what was being said.

Another aspect in trying to bring about a renewed vigor to the language came to me from a passage in the Bible that reads: "Child is the father to man." This passage remained fixed in my mind, and the more I reflected on it the more I thought about its significance with regard to getting language reestablished in the home. My basic premise was that through children learning language their parents would begin to want to learn as well. I also suspected that parents could actually begin to learn some Arapaho from their children. Having these thoughts tumbling around in my head, I began to seek ways to get the language more visible within the community and home.

It is interesting how some of our strongest efforts can at times bring about opposition from our own people. As our language efforts intensified so did the criticism. I frequently heard comments about the sacredness of the language and that it should not be in cartoons, in books, or on computers. Comments like these made me wonder what benefit could come by keeping language locked away as though it was in a closet. I also wondered what was it that made a language sacred. A clue to these thoughts came from what many consider to be a Sacred book of writings—the Bible. It was the parable of the talents (Matthew

25:14-30). In this story a wealthy man went away and gave three of his servants talents (money). To one he gave five talents, to a second he gave two talents, and to the third he gave one talent. The man who received five went out and traded with them and made five more. Likewise, the man who received two went out and made two more the same way. But the man who received one hid it away in the ground. When the landlord returned he called the men to him and was pleased by the actions of the first two. But when the third man came forward and stated because he had heard that his landlord was a hard man he hid the talent in the ground. Having heard this the landlord became angry and had the man cast out saying "from the man who has not even what he has will be taken away" (Matthew 25:29). This parable has served to illustrate to me what is happening with our languages. We have been given something sacred, and we recognize its sacredness. However, instead of blessing our children with this Sacred gift, a vast majority of speakers seemed to have buried their language out of reach from our children and out of reach from our future.

After assessing the school's Arapaho language classes it was very clear that they were one dimensional, focusing almost exclusively on numbers, colors, and a variety of vocabulary words including food items and animals. And, although students from grade two to six could recite a translation of the Pledge of Allegiance, these students did not have any comprehension of what they were actually saying. Students at the Junior High presented a similar problem. For them a major bulk of their learning was focused on reading skills. It was unfortunate however that they had little to no understanding of what they were reading. At the High School level Arapaho language classes presented a completely different scenario. Most of these classes were very small because Arapaho was optional. These small classes should have presented an excellent opportunity for individual learning to occur. Those times when I went to observe students, however, the classes were being used as a time to watch popular videos, such as *Terminator, Die Hard,* and *Lethal Weapon*. Rather than fight a practice that had been established over the years, I chose to focus on the younger age groups, and took a position that if their language skills could be strengthened then through the younger classes change could come about from the bottom up. The difficulty, however, was to get the elementary school principal to recognize that it was necessary to make changes to actually bring about change. This was when I first brought to his attention that 15 minutes of language instruction a day could only result in an environment that did not breed learning. That part, and how 15 minutes of daily class instruction when multiplied by 180 school days equals 45 hours of language instruction per school year, was readily understood. As this seems to represent the amount of time typically allocated to Indian languages throughout "Indian Country," it basically means our languages have only been given the amount of time devoted to one work week for each academic year of study. I challenged him to think what the result would be if that represented the total amount of time teachers were allocated to teach each individual subject of the school's standard curriculum. From this I was able to implement an 18 week pilot study in which a kindergarten class received an hour of language instruc-

tion each school day. Implementing this project was not an easy task as the class had to overcome some serious opposition from the kindergarten teachers.

The new pilot language class was composed of 15 children. The children were split into two groups of five, and each group rotated through three different language stations. They spent 15 minutes at each station, and at each station they were exposed to a different language instructor with a different language objective. Each station was set up to focus on a specific area of language proficiency, such as learning vocabulary, how to ask questions of each other, and how to respond to questions when asked by others in the class. Another area of language use focused on food items and discussions revolving around meals. For the last 15 minutes of the hour-long class all the children were combined into one group and another instructor came in to work with them. In this last 15 minutes there was a stronger emphasis placed on whole language learning. The children had to respond to full sentences with full sentences. During this time they were challenged to figure out things and to accomplish specific tasks. A conscious decision was made to not deviate too much from what was standardly done. Hence, a lot of vocabulary words were learned. While this had been the case for the pilot class, it is important to note that the children also had command of a large list of Arapaho phrases.

After twelve weeks the children in this class had mastered a vocabulary of 163 words and phrases (see Figure 1). At the end of the 18 weeks these children displayed a vocabulary that consisted of more than 200 words and phrases. This stood in remarkable contrast to other students in classes from first to third grade that at best had mastered around 30 to 40 Arapaho words and phrases. Toward the end of the 18 weeks I had brought in a video camera and told the children that I wanted to make a video of what they could say in Arapaho. I told them that the video was going to be sent to a class of Indian children in Canada, who just like themselves were studying their language, and that the video would help them see how much could be learned. I had with me a sheet with 209 English words and phrases that the children had to translate into Arapaho. I started the camera and read the list off. The children were incredibly enthusiastic, and in a matter of 25 minutes had gone through the entire list not missing a single item. I was later devastated when I realized that the film had not properly loaded in the camera. What was achieved with this class would later provide a strong impetus for implementing a kindergarten half-day immersion class for the 1993/94 school year (see Greymorning, 1997 for more information on this class).

With the success of the kindergarten class I was actually quite surprised that there was considerable resistance toward the language initiatives I was trying to implement. In fact that resistance seemed to increase with the success of the kindergarten class, as a faction of Arapaho speakers actually argued that Arapaho children would be better off learning Spanish. Ironically, high school students had learned to speak Spanish better than they had learned to speak Arapaho. As this presented a serious obstacle, I felt it was important for people to see a successful language program at work in order to show that children can really become fluent speakers of their language.

Figure 1. List of Arapaho Words and Phrases Spoken by Kindergarten Children after 12 Weeks of Arapaho Language Instruction

Phrases (32)	Body Parts (15)	Clothing (8)	Animals (36)
write your name	body	hat	cat
sit down	hair	shirt (men's)	dog
stand up	head	shirt (women's)	horse
come here	face	socks	bear
come in	eyes	shoes	snake
listen	ears	pants	beaver
sit still	nose	gloves	mouse
be still	mouth	belt	wolf
move over (standing)	teeth		coyote
move over (sitting)	neck	**Colors (9)**	duck
can I touch him	elbow	red	rabbit
can I ride him	hand	pink	antelope
are you hungry	knee	white	sheep
I am thirsty	leg	brown	owl
pick it up	fingers	purple	bird
throw it away		black	turkey
what are you doing		grey	cow
I am jumping	**Foods (13)**	blue/green	porcupine
jump	apple	orange/yellow	bug
throw it (an.)	bread		sage chicken
throw it (inan.)	butter		pig
go and get it	corn		chipmunk
I am hungry	bacon		elk
can I feed him	eggs		salamander
what is your name	meat		hawk
my name is…	water		raccoon
give it to me	potatoes		turtle
quit it	milk		deer
put it down	orange		fish
line up	salt		frog
talk loud	sugar		crow
lets go			monkey
			spider
Numbers (1-30)			chicken
			buffalo
			butterfly

Misc. word items (20)		
ball	plate	grandma
box	fork	grandpa
chair	spoon	mother
cup	tree	father
knife	rock	what
paper	river	hello
snow	mountain	

Total Count **163**

In May 1993 a conference dealing with Native American Language Issues was held at Hilo, Hawaii. The conference highlighted the Punana Leo language immersion work being done throughout Hawaii, and it gave me the opportunity to see the full extent of what was possible by observing first hand three and four year old children speaking their Hawaiian language. It was like witnessing a miracle, and it was the inspiration of those children that I brought back with me to try to instill within our own language program.

While attending the conference in Hilo I took some 60 hours of video recordings. This was edited down into a 20 minute presentation that was also used as a working model to strive toward. As a result of being able to show the tapes of the Hawaiian immersion preschools, the elementary school principal allowed a half-day kindergarten Arapaho language immersion class to be implemented in September 1993. Owing to the nature of the children being in an immersion class, I was able to convince the elementary school instructors of music, art, and physical education to allow their classes to be instructed in Arapaho by the Arapaho language instructors when the immersion class was in those subjects. Much to the credit and commitment of the Wyoming Indian School District #14, the kindergarten immersion class has continued. Although we had our first immersion class in place, I knew this single class was not enough to make an impact on the language. I knew if we were going to run the gauntlet then what we needed was something more along the lines of the language renaissance that was happening in Hawaii and New Zealand, and that meant starting up more language immersion classes. The work before us was only now beginning to get started.

In January 1994 a two hour a day, four days a week, Arapaho language immersion preschool class was implemented. This class was expanded to three hours a day, five days a week, in September 1994, and then in September 1995 the first full-day language immersion class was begun. One year later a second language immersion preschool class was implemented, and at present the Arapaho language immersion preschool has become a part of Hinono'eitiit Hoowu'—the Arapaho Language Lodge, a nonprofit organization with the objective to work toward maintaining a language environment that will generate new Arapaho speakers. Although this may sound like a lot, when compared to what the Maori people of New Zealand and Hawaiians have accomplished with their language programs, it is clear that the work of the Arapaho Language Lodge is only just beginning.

At a time when some of the most basic issues of learning are pondered by educators, like confidence, self-image, and self-esteem, I have seen the impact that being able to speak one's Native language has had on Hawaiian and Maori youth. In June 1997, I observed Maori youth preparing for a Haka competition. What was most impressive about the Haka these Maori youth composed and prepared for competition was the history it related of how the Maori fought for their land and culture. In their presentation young Maori women stood behind the men intoning that if the men die in their fight then so too will the women.

I also had the opportunity to see Maori children in an elementary school perform a Haka. While their Haka was less political it still carried the strength and commitment that seems to be very much a part of Pōlynesian culture. It also seemed apparent, at least in my mind, that these children will be ready to replace the leadership when they come of age, as nothing seems to be lacking in their confidence, self-image, or self-esteem.

As the Arapaho Language Immersion Program completes its fifth year of operation, it continues to draw much inspiration and guidance from Hawaiian and Maori language immersion programs. While I was in New Zealand, the Maori spoke to me of their immersion philosophy of "language from the breast." Children who can barely walk are continually surrounded by Maori language, culture, caring, and love, as it traditionally was in our own languages and cultures and so should it continue to be. Hinono'eitiit Hoowu', the Arapaho Language Lodge, has drawn from this model to implement a Mother/Child language program. Through this program we are exposing mothers to the language of nurturing and caring for their children in Arapaho. Parents learn from an Elder woman who imparts to them the Arapaho language that she remembered being used when caring for Arapaho children, children who grew up speaking the language within Arapaho traditions. Benefits expected from this language program will come from children as young as 16 months old being exposed to the language, so that by the time they enter the immersion preschool class they will do so already speaking Arapaho. Another benefit anticipated is for adults to begin learning to speak Arapaho through the most natural bond: the bond that exists between parent and child.

As we look back, around, and ahead, we have seen frustration, success and struggle. And though language immersion is not easy work, if our languages are to survive then it is a necessary work. If I am to end with one closing image to illustrate the commitment needed to embrace this work then it would be the following. In June of 1994, I was traveling back from California where I had helped with the final edits of the Arapaho Bambi video. I had been pushing it to get back in time for the week-long H.I.L.T. workshop. When I got to where the workshop was being held and started to walk into the building I paused and looked out at an area where an Arapaho summer ceremonial is held about a quarter of a mile from the high school. As I stood up on that rise thinking how it would look in a few weeks covered with teepees, I was startled as in my mind I saw an image of a huge wall of water moving toward the village. I knew that wall of water symbolized the worst of development and technology: that which would destroy language, culture, and all that those before us had fought so hard to protect for future generations. It was frightening. I remember standing there looking at that wall of water and thinking; "I will hold you back." But as I said the words, and realized the power of that approaching force, I thought how foolish and small I was and I dropped to one knee and wept. As I knelt there in that position something came over me that I can only express as the Spirit of the Dog Soldiers. These were the warriors who would lash themselves to a wooden stake or arrow driven into the earth, and from that spot they would meet the enemy,

fighting for the safety and well-being of their people. In essence they were fighting for their cultural way of being, and only death would move them from the ground they held. When I was down in that position I symbolically tied the leather thong around my leg and stood up and said "I **will** hold you back!"

If we are to truly be successful in our efforts to pass our languages on to successive generations, then through commitment like that of the Dog Soldiers, "from ancient Sacred ground we will guide our paths into the future" (Greymorning, in press).

Note: The word "Indian" (erroneously applied by Columbus who mistakenly believed he had reached an island off the coast of India) has been received with mixed emotions by the original inhabitants of North America. In Canada, an effort to outdistance the stigma has resulted in using Native, with a capital "N": This however has also been received with mixed feelings. Internationally, "indigenous" has been applied with growing acceptance. Instead of using an uncapitalized indigenous, however, I have chosen to use "Indigenous" (with a capital "I") much along the same lines as Canada distinguishes between "native" when referring to being of a place and "Native" when referring to the particular peoples indigenous to Canada before European contact. I have also used "aboriginal" with some frequency when referring to groups, populations, or cultures at an early period in history. Although my preference is toward the use of Indigenous, because of the widespread usage of "Indian," certain situations have at times forced me to acquiesce to its usage.

References

Greymorning, Stephen. (in press). The colonization of indigenous North America. In R. Craven (Ed.), *Teaching aboriginal studies*. St. Leonards, Australia: Allen & Unwin.

Greymorning, Stephen. Going beyond words: The Arapaho Immersion Program. In J. Reyhner (Ed.), *Teaching indigenous languages*. (pp.22-30). Flagstaff, AZ: Northern Arizona University.

Mathew. (1996). *The Jerusalem Bible*, Alexander Jones, general editor. Garden City, NY: Doubleday.

Sm'algyax Language Renewal: Prospects and Options

Daniel S. Rubin

This paper describes the Sm'algyax language program being implemented in School District 52 in Prince Rupert, British Columbia. It examines ways to support language renewal ranging from traditional forms of instruction and print-based materials to computer interaction and internet resources.

School District 52, located in Prince Rupert, British Columbia, Canada, has made a major commitment to First Nations[1] language and culture programs. To follow through on the commitment to provide support for the renewal of Sm'algyax, the language of the Tsimshian Nation, followed by the Nisga'a and Haida languages, a well-informed and strongly supported approach to language programs is needed. The development of programs in the three traditional First Nations languages in District 52 is not a simple matter. Finding and training instructors, defining the approaches to be taken, and developing appropriate materials requires new partnerships and new ways of looking at language learning. Nor does the responsibility for language renewal rest entirely with the schools. It is widely recognized and affirmed, by local and non-local, native and nonnative individuals, that responsibility for the renewal and spread of traditional languages and cultural practices rests inherently with First Nations communities.

Over the past decade, support for First Nations language learning within British Columbia schools has created a range of language programs, but these programs have not produced a significant resurgence in fluency. It may be that no school-based program alone can have this effect (Cantoni, 1997; Fishman, 1996). However, with the foundational work that has now been completed and support from new communications technologies, unprecedented possibilities are emerging, just as the hope for language continuity fades with the aging of those who still speak traditional languages.

There was an immediate need for the Tsimshian Nation to provide guidance and to establish a positive direction for Sm'algyax language programs. At annual meetings in 1994 and 1995 the Tsimshian Tribal Council affirmed the importance of cultural and language continuity in its resolutions and supported the establishment of a Sm'algyax Language Authority.

The urgency of the situation calls for teamwork and a commitment between the Tsimshian Nation and District 52 to find new contexts in which the language will be used on a daily and/or occasional basis. To be effective and legitimate, key decisions regarding the preservation and teaching of Sm'algyax must be made by the Tsimshian community. These decisions are needed quickly and

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[1]"First Nations" is a term currently used to describe indigenous (American Indian) groups in Canada.

should be informed by the best information available regarding the state of the language, language program options, and the urgency of the situation.

State of the language

The current state of Sm'algyax, like other First Nations languages in British Columbia and across North America, is precarious after 100 years of interactions that have systematically undermined and discouraged language use and cultural continuity. At this time however, a resurgence of cultural pride and autonomy is taking place. Since Sm'algyax and Tsimshian cultural traditions have persisted in spite of the forces of assimilation, there is cause for optimism. With the active support of schools and other institutions, programs to support language renewal have been established. Yet, even with this support, the continuity of Sm'algyax is in jeopardy. District 52, like others in British Columbia, has had language programs in place for two decades, and some evidence should exist of a basic increase in language use and fluency among the young if these programs have been effective. In fact, there is little evidence that a transfer of linguistic skills or usage to the younger generation has taken place.

While it is inspiring and reassuring to see the public use of Sm'algyax within the formal affairs of the Tsimshian Nation, and while many individuals have called for improved instruction in the language, there are few existing settings in which the use of Sm'algyax is required. According to one knowledgeable local educator who has worked with the language over the past two decades, only a few hundred fluent speakers remain, and almost all of these are over 50 years old. The lack of young people speaking Sm'algyax threatens the survival of Tsimshian culture. According to Nisga'a linguists and educators Alvin and Bert McKay, "A people's own language is a symbol of their ethnic identity, as well as a repository of much of their cultural heritage; its loss threatens the life and vitality of the culture" (1987, p. 66). This is especially true because the language is more than a symbol. It embodies a way of seeing, which is expressed in its syntax and structure even more than in the particular words that make it up.

It is understandable, with the complex issues facing First Nations communities—land claims, health issues, educational funding and academic parity, fisheries, forestry, and devolution toward self-government—that language renewal has not received more attention until now. However, language renewal may be one key to cultural integrity and effectiveness. For First Nations individuals who are becoming well established economically and socially within the larger society, maintaining a connection with the worldview and traditions of their people has become very important. For many First Nations students, their deeply felt interest in learning about and maintaining their cultural connections may be a source of motivation for language learning. But how can this motivation best be supported and extended?

Learning vs. acquiring a language

Language learning is a complex process, even though we recognize that young children accomplish it readily. Infants have the ability to make the full

range of sounds found in all the languages of the world, but this ability lessens as we grow older. Acquisition of a second language is more problematic for older people, and language learning in adult education is fundamentally different from language learning for children.

Traditional instructional approaches based on rote instruction and repetitive practice have been used in District 52, as in other districts, but they have not been particularly successful in developing fluency. There is a crucial difference between accumulating words and phrases and knowing how to use them in a real life situation. As some educators and linguists have pointed out, this is the difference between "learning" a language and truly "acquiring" that language for daily use.

T.L. McCarty (1988) notes that, "The distinction between acquiring and learning a language is...essentially a distinction between *meaning* and *surface form*." (p. 74). Teacher-centered instruction has not helped learners acquire a deeper understanding of meaning, because (a) the approach to learning has been passive rather than communicative, (b) support for language use outside the school has been largely missing, and (c) students have limited opportunities to use the language communicatively in school. Again, McCarty writes,

> Classroom-based language development activities...frequently ignore what is known about the structure and acquisition of language, separating out discrete linguistic tasks to be 'taught' as isolated tasks. Such approaches disembody language, depriving Indian children of the opportunity to use their language...in real communication. (p. 81)

As Steve Greymorning (1997 & this volume) attests from his experience with the teaching of Arapaho, the focus on learning vocabulary and a lack of opportunity for the daily practice of speaking that is found in much classroom language instruction limits children's natural abilities to learn and use language. McCarty (1988) maintains that, "Language acquisition... is a much more complex and subconscious process than repeating, imitating, and practicing" (p. 71). There is a need to recognize the elusive, subtle, emotional, and personal aspects of language use. McCarty concludes that "the subconscious processes of making sense of language input, in purposeful communication, most influence oral language development in both first and second language situations. Conscious learning, on the other hand, has a more limited role" (pp. 74-75). On the structural level, language is made up of units called *phonemes* (sound units), *morphemes* (units of meaning), *syntax* (word order), *usage rules* (how words are to be used), and *interpretive rules* (how to tell what words mean). However, in terms of actual language use, language is the vehicle for feeling, imagery, poetry, story, and metaphor. To understand the essence, the life within the language, is the point of language learning.

The most effective situations for language learning are communicative, natural, interactive, creative, subtle, powerful, and metaphoric. Sylvia Ashton-Warner (1963) built on this understanding of language in the programs she developed

while working with Maori students in New Zealand. She used a questioning technique she called "Key Vocabulary" to draw out words of great personal significance from students, then built her language program around using these personally potent words in sentences and stories. When I worked with Sylvia in the mid-1970s I saw that it was difficult for her to pass on her understanding to teachers. The traditions of the education system, based on rational deductive thinking and rote learning, break everything up into little bits, so we easily miss the point: what does this mean to the child? Without a personally meaningful reason for children to learn and use their language, why would we expect them to learn it? Thus, an effective language program design depends on defining meaningful outcomes for the program.

Five levels of fluency

Five possible levels of fluency can be identified as possible outcomes for language instruction. The same level may not be appropriate as a goal for all learners.

- **passive**: able to understand common words or phrases, with or without deeper comprehension of their meaning
- **symbolic**: able to use common phrases and sentences in formal settings, as symbols of language participation and cultural ownership
- **functional**: able to speak the language, with basic understanding of its syntax, grammar, and rules of usage and a minimal vocabulary
- **fluent**: able to understand and speak the language with confidence and skill, with understanding of normal syntax, grammar and rules of form, and an extensive and growing vocabulary
- **creative**: able to understand and speak the language fluently in ways that create new word usage and structures, showing a deeper understanding of the language and its potential new uses

People who speak a language obviously operate at different levels at different times. But it should be possible to define general or minimum goals for school programs in Sm'algyax at different grade levels. Until we define the goals of the program, it will be extremely difficult to develop curricular scope and sequence or implement effective language programs.

Need for a community dimension

It is widely recognized that the main responsibility for traditional language learning must centre in the home. It is not appropriate for the school to take this responsibility away from families and communities who ultimately own the language. Schools can play a role by organizing and presenting opportunities for children to learn and use Sm'algyax, but any attempt to teach the language solely within the school will fail (Cantoni, 1997). This caveat has serious and immediate implications for language programs in this district.

How will the community component be organized? Who will organize and present it? How will the language find its way into the homes of parents who do not presently speak Sm'algyax? How will embarrassment and the initial difficulty of learning the sounds and syntax of Sm'algyax be overcome? First Nations educators are aware that dialect differences and other issues can fragment the community, making the process of language renewal very difficult. Across three generations there can be elders with a traditional orientation, parents looking both forward and back, and youth caught up in MTV and being kids. All three generations must get together if First Nations cultures are to be saved.

The community dimension of language programs has yet to be defined for the Tsimshian Nation. Until the village communities and urban groups, with the active and visible support of the Tsimshian Tribal Council, stand together to support language renewal, it is unlikely that any program School District 52 implements will have a significant impact.

Oral literature as curriculum

Another reason it is difficult to teach the language in the schools is that Sm'algyax belongs to a real world setting that is natural, traditional, and imbued with its own set of meanings and ways of seeing. It embodies a different worldview from the Western scientific one around which schools are organized. Some attempts to record, document, and transmit the Tsimshian worldview have been made. These have ranged from anthropological and linguistic studies to illustrated books for children. Throughout British Columbia, First Nations groups have been authoring their own locally appropriate expressions of culture and traditions.

District 52's major project, undertaken in collaboration with Tsimshian communities, resulted in the completion of the Tsimshian Series, seven books based on traditional *adawx* (historical narratives) that help define the Tsimshian Nation. Although the stories presented within the Series were taken from oral literature, they are certainly as valid a basis for curriculum as the teachings of math, biology, or eurocentric geography. As First Nations educators and leaders are increasingly pointing out, traditional ways of knowing do not necessarily have to be referenced to the European traditions to be valid. It will be important to actively support and validate the use of oral literature in the schools.

There is also a deeper way of seeing the role and importance of these stories, beyond their use in curriculum. The traditions of the Tsimshian, as expressed in adawx, in stories recorded by William Beynon, Franz Boas, and others who have studied these traditional tellings, present a creative theme of rebirth and regeneration.

We can look at the present desire to reaffirm and renew culture and language as an opportunity for creating new cultural forms. Within the feasting tradition that is so important to the Tsimshian people are models of how culture and language are to be passed on. The Tsimshian community can certainly draw on its own traditions to ensure its continuity, define who will pass on the lan-

guage, and determine how this will be accomplished. To defer this responsibility to the education system will likely lead to language loss.

The development of well-organized, highly visible initiatives that capture the imagination and support of the community will be very important. This process may become easier once a Sm'algyax Language Authority is established.

Establishing a Sm'algyax Language Authority

The creation of a Sm'algyax Language Authority is an essential step toward language renewal. With a language authority in place, decisions regarding training and certification of language teachers, maintenance of traditional patterns of grammar and syntax, and a screening process for new words and word forms can be made with input from representatives of the principal groups within the Tsimshian Nation. More fundamentally, this body can serve to unify and focus the cultural aspirations of the Tsimshian people at a time when unity and commitment are needed to keep the language from disappearing. As a body with the authority to review and develop language policy, the Sm'algyax Language Authority can move in a positive direction to elicit enthusiasm and support from village Band Councils and other Tsimshian community groups. It can also provide guidance for the planning, development, implementation, and evaluation of new programs.

Options for Language Learning

I have found the Internet to be an invaluable tool for researching examples of effective language learning in indigenous communities in North America and elsewhere, and communication with educators in Australia, Vanuatu, Hawai'i, California, South Dakota, Ontario, and throughout British Columbia revealed a range of programs and approaches from which to choose. Depending on the goals established for a language program, using one or more of the ways of supporting learning discussed below may be appropriate.

Print-based materials

Over the past decade, the major focus in District 52 and throughout First Nations education has been on developing print-based materials: books, worksheets, pamphlets, posters, and games. The quality of these materials has improved over the years, from hastily assembled scrapbook-like collections of stories, visual images, and word lists to published narratives and texts written in the traditional language, with or without English translations.

Some print materials have been developed to a level that is high quality and effective. In a few instances, actual textbooks for traditional languages have been compiled. Daisy Sewid-Smith developed a Liq'wala/Kwak'wala instructional grammar, which is being used in a secondary program in the Campbell River School District. When I visited the Campbell River program, I was impressed by its effectiveness. Its strength was its organization around the func-

tional structure of the language, which helps new speakers respect and use the language in its traditional form, rather than modifying it into pseudo-English forms.

Our own Tsimshian Series is the local result of an ambitious publishing venture. The Series is richly illustrated and presents a range of traditional adawx that embody and pass on the traditions and pride of the Tsimshian people. While the general reaction to the Series, both within and outside the district, has been quite positive, there have also been some issues raised, including concerns about the small sans-serif type, difficulty for non-speakers in pronouncing the Sm'algyax text, and the fact that the text, although written at a lower intermediate level in terms of word length, is actually more appropriate for use at the lower secondary level because of the complexity of the concepts that are presented.

Current projects of First Nations Education Services Department of School District 52 include development of a new series of illustrated books that include an intermediate level seaweed book and a carefully selected collection of primary level Txamsm stories. Work is underway to develop a series of phrase books for basic conversation, as well as a "Seasonal Rounds" poster series that will bring 400 Sm'algyax words into classrooms and homes.

Print materials are essential to develop literacy (reading and writing) in Sm'algyax. But even the best texts and storybooks do not ensure language continuity. Future development of print materials should be guided by the goals of the entire program. The dictionary and grammar developed by linguist Dr. John Dunn represent first steps toward a comprehensive reference work on the Sm'algyax language that is urgently needed as the main reference for language learning. Consideration should be given to expanding these references and transferring them to a computer data file, so they can be continuously expanded and improved. This work must be done while it is still possible to find living fluent speakers of Sm'algyax, individuals who are now of advancing age.

Dr. Dunn has made available course materials from his UNBC course based on the adawx "Adaoga gan Sit'aataksa wil Baasaxga Gyemk." This material has been reproduced and spiral bound and is now being used in the village schools.

Teacher-centered instruction

Based on visits to village schools, meetings, and discussions with the language teachers, it is clear that teacher-centered instruction is having limited effectiveness in developing fluency in Sm'algyax. The teachers have pointed out the following issues and problems:

- it is difficult to teach Sm'algyax effectively in short, intermittent half-hour sessions
- issues of respect and focus arise while working with students
- students are having difficulty retaining basic vocabulary
- students do not use their language after they leave the classroom
- there is little support from the home for language learning

- there is a need for more effective and vivid learning materials
- the traditional cultural context for learning the language is missing from schools

None of these issues is the result of lack of training or commitment on the part of the language teachers. The teachers have been the backbone of this program for years and are doing a good job with their students. These frustrations are inherent to the general situation of language loss, and the difficulties are characteristic of all second language programs.

The key reasons for limited success have been: (1) language and culture are not at the center of the curriculum, (2) instruction is repetitive and does not require students to actively develop and use their language, (3) approaches based on passive learning generate lower levels of commitment and interest than active student-centered learning, and (4) the quality of locally developed materials for language learning in Sm'algyax has been limited by the time and resources available in the past.

The tendency to develop programs in which the teacher is the main or only source of the language should be seriously examined. This approach restricts the ways students learn the language and tends to limit interactions to passive listening, repetition, and imitation. This teacher-centered instructional approach may develop the lower levels of language use (passive and symbolic) but will certainly not encourage higher levels (functional, fluent, and creative).

Additional inservice sessions for language teachers and training of new language teachers could address some of these issues and encourage the use of more learner-centered approaches, including games, interactive strategies, cultural immersion activities, new materials for use in the home, and the development of community-based programs to supplement and support school programs. New policies regarding the place of traditional culture and the Sm'algyax language in schools may be needed if traditional learning is to occupy a place of greater prominence within the school.

While comfortable and familiar, the teacher-centered approach (especially with the present intermittent scheduling of language instruction) offers little hope of developing any higher level of fluency.

Media-based instruction

Other school districts and sites in other jurisdictions have begun to use electronic media as a focus for language learning. Computer-interactive and computer-aided instruction are considered separately below, with the focus here being audiotapes, videotapes, slide programs, and interactive language machines, such as those that play flashcards with audiotape affixed.

These materials have been used mainly to supplement and support teacher-focused instruction. Media-based materials allow students to learn more independently, but scheduling constraints still impose severe limits on students' ability to spend time with the materials, unless they are available for them to take home.

Taking these materials home can make them expensive, since a certain amount of loss or damage is inevitable.

Videotapes, because of the protective design of the case and the familiarity of video, could readily bring language experiences into the home for both the students and parents. Videos in the home would also expose preschool children to spoken and written Sm'algyax. However, development of high quality video programming can be time-consuming and expensive. Through partnerships with other districts and tribes or with independent filmmakers, inexpensive, effective programming could be created. One possible format for such materials would be a children's show, hosted by an elder, with segments to include a traditional story, some focus on basic vocabulary used in conversation, a segment highlighting contemporary life in the villages (fishing, seaweed gathering, feasting, band council operations), and so forth. District 52 already has on hand two examples of stories told in English by Ernie Hill, taped in Hartley Bay, that provide simple but effective examples of videos for use in presenting traditional content through storytelling. A video series is one option to be further explored.

Computer-interactive and computer-assisted instruction

Computer learning programs are becoming common. They are being used at home, in schools, and in the workplace. The positive qualities of such programs are that they are inexpensive, can be reproduced in large numbers, are predictable, often have self-evaluation built in, are (in a limited sense) interactive, and most schools have access to some computer hardware. However, few schools have enough computers at this time to give every student access to one on a daily basis.

Computer-assisted instruction (sometimes the term is used to mean any interactive learning program on a computer) is probably more effective if the computer is used as a reference or supplementary source of linguistic information. For example, an interactive dictionary can help students look up word meanings, practice pronunciation, or check spelling. A computer-based language program can be used by a small group of students working as a team to solve a puzzle or play a game.

First Nations Education Services has begun assembling the hardware and software required for CD-ROM production. Thus School District 52 will soon be able to develop and manufacture their own interactive CDs that play on a computer. This format offers several interesting possibilities: 1) Stories can be linked with a dictionary in the computer's memory that would pronounce the story in Sm'algyax, translate words, phrases or the whole story into English, and provide visual images to accompany the story. 2) Games and puzzles can be developed that require language skills for their use or solution. This would provide an added incentive for language learning by students. 3) Reference materials can be developed, such as a list of all recorded Sm'algyax texts, giving older students opportunities to become researchers, studying and developing new uses for Tsimshian narratives.

Contact with other sites (such as the Carrier-Sekani and the Yinka Dene Institute) indicates that while they have been making use of this format, it was expensive to produce and is only one tool for language learning. Based on evaluation of a CD-ROM program for English language learning that I helped carry out for the Saanich School District, I would offer the same conclusion: a CD-ROM disk is a tool, not a complete program. As such, it may be worthwhile to develop the capacity for CD-ROM production, but the chief limitation is that once transferred to disk, materials are static and unchanging, at least until you revise and issue new versions.

The Hawaiian language program, supporting immersion schools based on the Maori language nest model, has now moved into production of computer programs. The staff of the Hawaiian Language Center, based at the University of Hawai'i at Hilo, have produced a number of interactive programs written entirely in Hawaiian (no English ever appears onscreen). They are currently translating the Macintosh operating system into Hawaiian. This ambitious program can be accessed via the Internet as well (see hypertext section, below).

A number of other computer programs for language learning and linguistic research have been developed, including a directory of aboriginal languages in Australia stored on a computer and accessible worldwide via the Internet. The resources at the Australian languages site include a manual for language workers, laying out a step-by-step procedure for recording and accessing linguistic information on computer. These resources suggest new computer-based possibilities that are made even more interesting with the introduction of the World Wide Web and html as a text format.

Internet resources and hypertext

Research has increasingly made use of the Internet, and specifically that aspect of the Net referred to as the World Wide Web. On the Web, text is written in hypertext markup language (html, for short). HTML allows the reader to jump from a word or phrase to another point on the Web automatically, just by clicking on the highlighted text. So text written in html generates a nonlinear web of information. As First Nations education sites have begun to appear on the Web, they are being linked together into a constantly changing network of new possibilities that educators can access.

Text written in html also has some special applications for language learning. The wide range of possibilities includes a new type of dictionary, with words linked in a variety of ways (see e. g., Miyashita & Moll, this volume), including some that are more natural than alphabetic and are actively linked to texts such as stories. For language learners and researchers, the resulting hypertext document can begin to reflect the realities of the original culture, rather than a European interpretation. One example of this is a program called "The Red Road," which appears on the Web as a series of webpages complete with vivid First Nations imagery and links to a large amount of cultural information.

We do need to find ways to embody the worldview and structure of the language visually. This is also important because Sm'algyax, like some other

First Nations languages, emphasizes relationship and action, rather than focusing on nouns as label words. A standard dictionary should still be developed, but the hypertext version could be much more flexible and responsive to the needs and interests of learners.

Various types of sites exist on the Internet, including mail servers that deliver personal e-mail, web homepages that represent companies, government offices, and educational sites, and listservers that "publish" discussions by sending comments out to a mailing list of subscribers and chatlines that provide for real-time discussion among several persons at once. A new and innovative type of site is called "Pow-Wow." Pow-Wow allows up to seven people at once to link together and talk to each other, while moving through the Net as a group. This offers some exciting new possibilities for linking learners from different sites (say, two village schools and two schools in town) and allow them to use the Internet as a learning tool while sharing what they learn.

A school district or even First Nations Education Services could establish its own homepage on the Web, allowing students, speakers, teachers, and linguists to continuously access and add information to it. In this way, the Internet would offer twenty-first century technology to the revival of an ancient language while helping learners acquire valuable contemporary job skills.

The Silent Way: Letting learners learn

Jim Green, a linguist and teacher who works with the Lakota language in South Dakota, has developed a method of language learning called the Silent Way after the work of Caleb Gattegno (1972). It is called this because the teacher does a minimum of talking, always speaks in the native language, and encourages learners to do the talking and the learning. Green describes this approach as "subordinating teaching to learning" and explains that this strategy is based on a deep respect for learners, a respect not always found in education.

The Silent Way has been widely used in math teaching, where manipulable materials like attribute blocks and Cuisenaire rods allow learners to learn directly. The approach is based on the ideas of Gattegno, a professor of mathematics. Jim Green, who worked with Gattegno, uses these same colored wooden blocks to teach concepts like number, color, and simple language forms in Lakota. His internet site (http://www.geocities.com/Paris/9463/method.html) explains this method. The site includes color-coded phonics charts that help students learn the sounds of Lakota without a teacher having to model them.

Although this approach sounds exotic, it is fairly simple and suggests that there are ways to create and use materials that encourage students to move at their own pace, building language skills in a nonthreatening environment. However, ultimately they will need to begin using language interactively, so any approach based on materials, whether print, media-based, or computer-based, will benefit from an active, experiential component.

Experiential approaches to language learning

During November and December of 1995 a plan was completed for an integrated language and culture curriculum for Grades 8 and 9 in Lax Kw'alaams. Inspired by the idea that language and culture need each other to be meaningful, the program is an integrated Sm'algyax Language/Tsimshian Culture course with units focused on traditional seasonal activities. Copies of the outline of this course are available from First Nations Education Services (825 Conrad Street, Prince Rupert, BC VAJ 3B8 Canada).

Experiential learning focuses on doing, rather than on passive listening and reading. There are many examples of successful experiential education in physical education, outdoor education, cultural exchange, and apprenticeship programs. For Sm'algyax to have meaning and relevance to learners, it may help to combine its use with traditional hands-on activities, such as berry picking, fishing, food preparation, smoking fish, hunting, drum making, dancing, carving, weaving, and feasting. These experiences provide opportunities for language use and place demands on students that are holistic and natural: to have respect for those with traditional knowledge and skills, to pay attention, to practice manual skills, and to remember important details.

Experiential approaches, according to input from the members of the Sm'algyax Committee, the First Nations Role Models and the students themselves, would be a preferred way to learn the traditions of the Tsimshian people and to begin to speak Sm'algyax. An initial, informal survey indicated Grade 8 students in Lax Kw'alaams also support this option.

Experiential programs generally take a good deal of preparation, resources, and scheduling to be successful. If strongly supported by the community and the school, they can provide memorable experiences for children, experiences they will carry with them for many years. The use of writing, reading, and speaking in the Sm'algyax language can be woven through such programs. Experiential programs may involve field trips, hands-on activities, and require a more flexible attitude toward scheduling on the part of school staff.

Cultural immersion

Cultural immersion carries the experiential approach to its logical conclusion: living and working in a traditional setting for a period of time. This approach has been the basis for Rediscovery Programs, Culture Camps, and other immersion programs. By combining language and culture in an outdoor setting, students are given a chance to absorb and learn from their elders in natural surroundings. This is a powerful option, but one that will require an even stronger commitment from the local community and careful preparation to ensure the safety of participants, the availability of necessary resources, and positive experiences for participants.

A great deal of expertise now exists regionally and locally, so there is no need to "reinvent the wheel" when it comes to organizing and setting up such a program. It would be up to each local community to provide space and resources

for such a program, which probably would operate best during the summer months.

Another variation on cultural immersion is a setting such as a fishing camp, traditional smokehouse, or carving shed in which language use and cultural learning become natural parts of participation in a traditional activity. This type of approach should be encouraged because it is so motivating for learners and provides a natural, rather than an artificial, academic setting to support learning about the traditions of the Tsimshian people.

Linguistic immersion

The best known, and probably most successful, immersion program for language learning among First Nations would probably be the Maori language nests, originally established over 20 years ago in New Zealand. Now extending into the university level, these immersion schools offer instruction in Maori in all subjects. Canada's French immersion schools are based on the same premise: that to learn a language one must live and work in it on a full-time basis.

Not everyone thrives in such a setting, but for some learners, with the enthusiastic support of their parents, the language immersion setting has been very effective. However, any approach to schooling that separates and isolates a group of students will have some disadvantages as well as advantages.

A complete immersion environment requires that teachers be fully fluent and supplied with materials that allow them to work in the language of choice. This is quite a challenge when the language is not a modern one in use within a large population. A careful look at the availability and cost of creating new materials would be advisable before any commitment to an indigenous language immersion school is made.

English as a Second Language (ESL) teachers, who deal with mixed groups of immigrant children in Canada and the United States, have become frustrated with standard learning materials and have led the way in creating some of the most exciting and effective materials for language learning. They focus on interactional strategies and games that allow learners to become more independent and to play while learning. This approach can be highly effective if students are encouraged to accept independence and responsibility. Many examples, models, and strategies could be borrowed from the ESL field to create new materials for indigenous language learning.

Mentorship and language continuity

Presently, there is an immediate need for younger fluent speakers of Sm'algyax to act as linguists and teachers. Training these individuals through intensive mentorship may be one of the best investments that can be made at this time. The master-apprentice model developed in California is an excellent way to provide this training (Hinton, 1994). It has been suggested by Margaret Anderson, a scholar who works with Tsimshian languages, that if the thousands of dollars previously spent on researching and writing dictionaries and grammars were allocated to such mentorships (through honoraria for mentors and students)

the language would already have been passed on to a core group of younger new speakers. The work of language teachers and teachers who have included traditional cultural elements in our schools has been invaluable. However, while honoring the work that has been done, it is now urgent that new approaches be considered. The development of mentorship programs to help create a core group of younger speakers should be seriously considered as an option for language renewal.

Recommendations

It is recommended that a high priority be placed on developing policy to support new approaches to language learning for Sm'algyax in School District 52. A combination of approaches may provide the best solution and offer the best opportunity to develop and field-test new materials and instructional strategies. The key issues to be considered at this time are:

1. What level of fluency will be the goal for First Nations language programs?
2. Who will provide instruction in Sm'algyax in the future and how will they be trained?
3. When and where will spoken and written Sm'algyax be valued and used?
4. What role will local communities and the home play in language renewal?

An update: Two years later

As of May 1998 we are much further down the road toward language renewal in Tsimshian territory than we were in 1996. Some of the steps that have been taken are:

1. A regional language renewal conference Dm Sa Gatgyedm Algyaga Ts'msyeen (Strengthening the Tsimshian Language) was held in June 1997 under the sponsorship of the Tsimshian Tribal Council. At that conference a strong endorsement for language renewal was received from those present, including chiefs, matriarchs, and elders.
2. The Sm'algyax Year One Program was established in Prince Rupert schools, effectively doubling the number of children learning the language within School District 52. Sm'algyax is now an alternative option to French as a second language for all students in Grades 5, 6, 7 and 8 in the town schools. There are four fluent speakers and four support teachers working in this program. Currently, more than 500 students are enrolled in Sm'algyax, including enrollment in the village schools.
3. Evening programs for adults are now being offered in two venues in Prince Rupert and also in the village communities of Metlakatla, Kitkatla, and Lax Kw'alaams.

4. Development of a detailed curriculum plan and learning resources for Year One is well underway by a committee of fluent speakers and teachers collaborating with the Sm'algyax Language Curriculum Developer.
5. Planning for the next three years of instruction within the Grade 5-8 Program is proceeding.
6. Drama programs utilizing English and Sm'algyax have resulted in the production of three original plays, which were supported by funding from the provincial teachers' association.
7. The Ts'msyeen Sm'algyax Authority has been established and has incorporated with an earlier existing language authority for the language to provide guidance and authority as an arm of the Tsimshian Tribal Council.
8. Tonya Stebbins, a doctoral student based at the University of Melbourne, working with a committee of elders and speakers, has completed a draft of a revised and updated set of dictionaries for Sm'algyax. The resulting document is also stored as a database, which may be updated on an ongoing basis into the future with the guidance of the language authority.
9. The local Role Model Program continues to provide exposure and involvement in the language and the culture to all students in our district.
10. Four storybooks about Txamsm, the Tsimshian trickster/transformer, were published with color illustrations by prominent Tsimshian artists and text in Sm'algyax.
11. A new curriculum guide *Respecting the Salmon* is currently under development with the support of the provincial Ministry of Education. This guide incorporates original stories in English and Sm'algyax and information, both traditional and contemporary, about the six species of salmon that are so important to the local culture.

Note: This paper is based on a discussion paper submitted to the First Nations Education Council, School District 52, on January 10, 1996, and revised May 10, 1998.

References

Ashton-Warner, Sylvia. (1963). *Teacher*. New York: Simon & Schuster.

Cantoni, Gina. (1997). Keeping minority languages alive: The school's responsibility. In Jon Reyhner (Ed.), *Teaching indigenous languages*. Flagstaff, AZ: Northern Arizona University.

Fishman, Joshua. (1996). Maintaining languages: What works and what doesn't. In Gina Cantoni (Ed.), *Stabilizing indigenous languages*. Flagstaff, AZ: Northern Arizona University.

Gattegno, Caleb. (1972). *Teaching foreign languages in schools the silent way* (2nd ed.) New York: Educational Solutions.

Greymorning, Steve. (1997). Going beyond words: The Arapaho immersion program. In Jon Reyhner (Ed.), *Teaching indigenous languages*. Flagstaff, AZ: Northern Arizona University.

Hinton, Leanne. (1994). *Flutes of fire: Essays on California Indian languages*. Berkeley, CA: Heyday.

Leavitt, Robert M. (1991). Language and cultural content in Native education. *Canadian Modern Language Review, 47*(2), 266-79.

Marsden, Susan. (Ed.). (1992). *Suwilaay'msga Na Ga'niiyatgm, Teachings of our grandfathers*. Prince Rupert: First Nations Education Services, School District 52.

McCarty, T.L. (1988). Oral language development for Indian students. In Jon Reyhner (Ed.), *Teaching the Indian child, A bilingual/multicultural approach*. Billings: Eastern Montana College.

McKay, Alvin, & McKay, Bert. (1987). Education as a total way of life: the Nisga'a experience. In Jean Barman, Yvonne Hébert, & Don McCaskill (Eds.), *Indian education in Canada: The challenge* (Vol. 2, pp. 64-85). Vancouver, BC: University of British Columbia.

Sewid-Smith, Daisy. (1992). *Liq'wala/Kwak'wala, Book I*. Campbell River: Education Center, School District 72.

Upper, Mary. (1993). Lessons from language acquisition: Reports on a study of Oji-Cree first language learning in the home. In *Selected papers from the 1988 and 1990 Mokakit conferences*. Vancouver, BC: Mokakit Education Research Center.

Reversing Language Shift: Can Kwak'wala Be Revived

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This paper describes the status of the endangered Kwak'wala language on Vancouver Island in British Columbia, Canada. Then different methods and procedures used in various language revitalization efforts throughout the world are reviewed and essential elements for successful language efforts are extracted to develop a proposal for the revival of Kwak'wala for the community and schools. It concludes with a discussion of the results when portions of this proposal were actually implemented at Alert Bay.

This paper is dedicated to God, the Creator of the
Kwak'wala language, and to all the speakers of Kwak'wala.

Among the indigenous people of British Columbia are the Kwakwaka'wakw, a group of tribes that speak one of the five dialects of Kwak'wala, a member of the Wakashan language family. At present the Kwakwaka'wakw are divided into 15 different tribes or family groups. Each tribe has ties to one home village, although several tribes may live in one village and some villages are abandoned. They are the original inhabitants of the northern part of Vancouver Island and now live in two major areas: the northern tip of Vancouver Island, centered in Alert Bay, and north-central Vancouver Island, centered in Campbell River. About 112 miles of virtually uninhabited country lie between the two areas. The term "Kwakwaka'wakw" was only recently coined, because there is no historic name or even a strong sense of Kwakwaka'wakw identity, though the people are joined by language, culture, and economy.

At the time of European contact in 1786, the Kwakwaka'wakw formed between 23 and 27 tribes or family groups, each allied to one chief. There was always intermarriage between groups and considerable movement for economic reasons. For example, if the chief of one group acquired a reputation for giving lavish potlatches, his group would likely increase. Each group had its own places to dig clams, fish, and so forth. Originally they were restricted nomads, moving from winter clamming beds, to spring eulichan (smelt) runs up the rivers, to summer fishing grounds. Sometimes two or more tribes shared the same village site, and group boundaries were constantly shifting owing to splits, mergers, and wars.

The coming of Europeans sped up the pace of change. Conflicts became bloodier with the introduction of guns, and new diseases decimated the population. The estimated pre-contact Kwakwaka'wakw population of 19,125 fell to just 1,039 in 1924 (Galois, 1994). Change accelerated in 1849 when the Hudson Bay Company built Fort Rupert. All the tribes came there to trade, and conflicts increased with more contact. Finally, the Mamalilikulla tribe came up with the

idea that instead of fighting with weapons they would fight with potlatches. That is, they would out-give each other in potlatch feasts.

In the late 1800s, the Canadian government began the process of making treaties with the indigenous people. Their first dealings were with Plains Indians, who were divided into bands. Treaties were not signed with the British Columbian Indians, but they were allotted reserves. Since the government was accustomed to dealing with bands of Indians on the prairies, they insisted on using the same term to deal with the indigenous peoples on the Pacific Coast. The term "band" did not fit well with the Kwakwaka'wakw, who were used to much more fluid units of self-identity. A band is governed by an elected chief and council, and government funding flows through the band. The band system of government and the term "band" are resented by some people who would prefer to return to the potlatch system of government with hereditary chiefs.

The language

The lack of strong Kwakwaka'wakw identity has hindered efforts to revive their language. There is little interest in learning a dialect different from one's own, and there are five dialects. As Wardhaugh summarizes,

> A group that feels intense solidarity may be willing to overcome great linguistic differences in establishing a norm, whereas one that does not have this feeling may be unable to overcome relatively small differences and be unable to agree on a single variety and norm. (1992, p. 31)

The latter is the case with the Kwakwaka'wakw. Fort Rupert was built on the Kwakiutl land, and the famous anthropologist Franz Boas further increased the prestige of the Kwakiutl through his lifelong study of them at the end of the nineteenth century, resulting in two shelves of ethnographic and linguistic materials. For these reasons, the terms Kwagiulth or Kwakiutl and the concomitant Kwak'wala became the general term for all 12 surviving groups. Initially, most people did not seem to mind identifying with the Kwakiutl tribe because of their high prestige, but now there is a movement away from this identification.

In 1977, the Summer Institute of Linguistics found 1,000 Kwak'wala speakers. By 1981, the census counted 975 Wakashan speakers, of whom Kwak'wala speakers are only a part (Grimes, 1988). In 1991, Statistics Canada counted 485 Wakashan speakers. Today there are likely around 200 Kwak'wala speakers, which account for less than 4% of the total Kwakwaka'wakw population. The handful of monolingual Kwak'wala speakers are all over ninety. There is also a one-sided pattern of borrowing: Kwak'wala forms are rarely used when a person speaks English, but English words are used freely when speaking Kwak'wala. The handful of bilingual parents have monolingual English speaking children. The occasions when Kwak'wala is still used include public speaking and singing at potlatches, funerals, and church services. Today, the majority of Kwakwaka'wakw live in the cities of Victoria, Vancouver, Nanaimo, and Campell

River where there is little opportunity to speak Kwak'wala. In order to "get ahead" everywhere—particularly in the cities—Kwak'wala is perceived as less useful than English.

The most commonly expressed reason for the decline of Kwak'wala by the Kwakwaka'wakw is that they were forbidden to speak it at St. Michael's Residential School in Alert Bay, which operated from the 1920s to the 1970s. Most Kwakwaka'wakw children, as well as children from non-Kwak'wala speaking villages to the north, attended and boarded at St. Michael's. Further study shows other reasons for the decline. Kwak'wala usage declined in lockstep with the Kwakwaka'wakw culture. Kwak'wala speakers are being attacked on many fronts. The Kwakwaka'wakw have been colonized and marginalized, and their language suffered in prestige by its association with their disadvantaged culture. English is perceived as the best avenue of social mobility and the only road to the modern world. The Kwakwaka'wakw who most resembled white people were rewarded economically. The Kwakwaka'wakw were faced by a cruel dilemma described by Fishman (1991): either to remain loyal to their traditions and language and to remain socially disadvantaged (consigning their own children to such disadvantage as well) or to abandon their distinctive practices, traditions, and language, and thereby to improve their own and their children's lots in life via cultural and linguistic suicide. The geographical separation that protected Kwak'wala in the past is proving no match for radio and television now bringing English into every Kwakwaka'wakw living room. However, the shift to English has not brought with it the promised material benefits. As Fishman (1991) notes, shifting away from one's native tongue brings its own problems and exacts a steep price. Assimilating populations have serious medical, psychological, and social problems such as crime and violence. A comparison of the villages of Alert Bay and Sointula (on neighboring Malcolm Island) highlights the problems faced by Kwakwaka'wakw communities. Although both have roughly the same population, Alert Bay has a hospital and two doctors. Sointula has a doctor, but he has to go off island to find work. Sointula has one policeman; Alert Bay has four.

Recently there has been a revived pride and interest in the language, and there is the frequently expressed perception that Kwak'wala can be revived in schools. However, the reality in the Kwakwaka'wakw communities seems to be the reverse. That is, the better educated a person is, the less likely he or she speaks Kwak'wala. It is spoken most fluently and most frequently by the problem drinkers and people who have done very poorly in school. The youngest speakers are often plagued with alcoholism and social problems, and some are known to speak Kwak'wala only when intoxicated. It is difficult to say exactly why this is the case. Maybe these Kwak'wala speakers are less able to handle the rapid erosion of their culture and language and take to drinking as a coping mechanism.

The Kwakwaka'wakw generally perceive they would be better off if they were able to hold on to Kwak'wala. Dawson (1992) echoes a sentiment frequently expressed: "We can have our dancing and singing for awhile but with

out our language our culture is DEAD." Kwak'wala is regarded as a symbol of the Kwakwaka'wakw and an integral part of the culture, and not merely as a tool that can be replaced by English. However, the current school-based Kwak'wala programs are not succeeding in getting the children to speak Kwak'wala with each other.

Spoken languages, like living things, are constantly changing, and most of the time speakers are not aware of these changes because they occur gradually. When change occurs so rapidly that the speakers notice it, it often causes concern, especially if they see their language is becoming extinct. Rapid change often occurs when there is extensive bilingualism, which can lead to one language being lost altogether. Although there are many bilingual speech communities in the world, "maintained group bilingualism is unusual" (Paulston, 1992, p. 70). Particularly unstable is the situation where the community is bilingual in a minority language as well as a language of wider communication, as is the case with Kwak'wala.

Some people seem ready to give up their language freely, usually for economic reasons. Bentahila and Davies (1992) describe how Berber parents actively encouraged children to use Arabic in preference to Berber, with remarks such as "Berber won't help you to earn your daily bread" and Arabic "gives an opening to the outside world" and "allows communication with everyone" (pp. 199 & 201). Bentahila and Davies note that some Berbers "appear to look upon languages as being rather like clothes, things for which one may feel a certain affection, but which are to be maintained only as long as they are of use" (p. 204) (for another view on Berber see Almasude, this volume). The Jews in Morocco appear to have similar attitudes, as supported by comments such as "whether I speak Arabic, French, or English does not affect my identity, which is Moroccan and Jewish" (p. 208). Pandharipande (1992) reports speech communities in India who are not concerned about losing their language, because they feel they can preserve their cultural identity through their traditional rituals, dress patterns, food habits, and their "unique values."

Language loss frequently occurs when society is in transition. It is often said that when a language dies, a world dies. But the converse is surely equally true that when a world dies, its language dies with it. The repression and/or loss of an ancestral language can be quite painful, because of strong emotional ties to the language. Wardhaugh notes that, "a demand for 'language rights' is often one of the first demands made by a discontented minority almost anywhere in the world" (1986, p. 346). The main goal of minority movements is usually the improvement or their lot or their children's lot in life. If language revival is perceived to run contrary to this goal, it will not succeed.

Five characteristics of successful language revitalization efforts

A review of research on language revitalization indicates that successful efforts share five important characteristics: a sense of group solidarity, immersion language teaching environments, literacy, the use of mass media, and the development of a sufficiently large group of speakers. Each characteristic is

discussed below, and specific suggestions are made on how the Kwakwaka'wakw could strengthen their language based on what can be learned from successful language revitalization efforts.

Solidarity: A language effort will usually fail if the focus is on language alone. It is much more likely to succeed if it is part of a greater societal movement. That is, if language promotion is part of a nationalist movement or is perceived as an expression of solidarity or ethnicity, it has greater potential for success. Discrimination and racism, which Jews, Maoris, and other minority groups often face, develop a strong sense of "us" versus "them" and aids language retention. Some language projects that are succeeding because people feel a strong sense of solidarity include French in Quebec, Catalán in Spain, Hebrew in Israel, Irish in Ireland, Frisian in The Netherlands, and Maori in New Zealand.

An American example of solidarity is with Me'phaa or Tlapanec, a group of dialects spoken by 75,000 people in southern Mexico. In the 1970s there was a barely passable road into Me'phaa territory, which brought in Spanish-speaking Mexicans and their attitudes. Mark Weathers writes, "It seems to me that in 1972 at least an influential segment of the Iliatenco [a Me'phaa village] society felt it was necessary to turn their backs on their identity as speakers of an unwritten 'dialecto,' which is the source of the severest discrimination in Mexico" (Mark Weathers, personal communication, July 1996). When indigenous people in Mexico come into contact with Spanish-speaking Mexicans, they tend to be ridiculed or despised for speaking their indigenous language. The shift away from Me'phaa was evident in children, who spoke Spanish as they were playing on the streets, and in adults, who refused to talk Me'phaa with strangers. In 1992, Weathers revisited Ilianteco and was amazed to find that although people could speak Spanish better than before, they had switched back to speaking Me'phaa. Influential Me'phaa leaders spearheaded a back-to-Me'phaa movement. Weathers speculates that after they achieved some status in, and some of the benefits of, the Spanish-speaking society, they realized they wanted to keep their Me'phaa identity and language. Their most effective action was to get rid of the Spanish-speaking teachers and replace them with Me'phaa ones. In defiance of the norm, the Me'phaa were able to actually use aspects of the Spanish-speaking society—books, radio, schools—to promote their language. The Me'phaa insist they are able to understand all the different Me'phaa dialects—something other Mexican indigenous groups with different dialects do not claim. This assertion of unity is one indication of the strong sense of Me'phaa solidarity (Charles Speck, personal communication, July 1997).

In order for Kwak'wala revival to take place, Kwakwaka'wakw solidarity is essential. Together, a whole generation must be willing to leave behind an existing way of life to create a new one, of which Kwak'wala is a part. One way this has been done is to actually move to a new location and start a new community where everyone speaks only Kwak'wala. Among Australian Aborigines there has been a movement where people leave the settlements set up by the government and form their own traditional "outstation" communities in the outback.

The new communities provide an atmosphere where people can eat Aboriginal food, practice Aboriginal customs, play Aboriginal music, and so forth (Fishman, 1991). Kwak'wala speakers could very quickly become the majority in a new community like this, but there would have to be compelling reasons beyond language, possibly economic and/or religious, to establish a community that spoke only Kwak'wala.

Isolation from other groups for religious reasons can also lead to language maintenance. The Old Order Amish have been able to preserve their variety of German right outside Philadelphia, and Hasidic Jews have been able to preserve Yiddish in New York City because they have protected their cultural boundaries through their religion. One radical way to put boundaries in place is to establish whole new communities made up of back-to-native-language advocates. Shortly after the turn of the century, Jews established Hebrew-speaking communities in what is now Israel. Although some of these communities failed, the ones that succeeded were able to help increase the number of native Hebrew speakers from zero to four million.

Literacy: All the successful efforts at language revitalization I reviewed placed a high premium on literacy. Fishman writes, "Unless they are entirely withdrawn from the modern world, minority ethnolinguistic groups need to be literate in their mother tongue (as well as in some language of wider communication)" (1980, p. 169). Most language efforts almost instinctively emphasize literacy. In India, the government gives prizes for writers who prepared Hindi materials for the newly literate. Nearly everyone in the province of Catalonia is being taught to read Catalán in Spain. The Me'phaa in Mexico are targeting literacy with the "Me'phaa 2000" program that aims to have 2,000 works in Me'phaa by the year 2000.

The German colonial government of Tangayika in Africa before World War II saw literacy as a way to spread Swahili. "Swahili newspapers were founded, and village headmen made reports in Swahili" (Paulston, 1992, p. 61). When the British took over after World War I, they continued this policy. As of the 1970s, literature in Swahili consisted mainly of periodicals and school materials. In order to demonstrate that the language is fully capable of being used for literary work, President Nyerere himself translated Shakespeare's Julius Caesar into Swahili. W. O'Barr notes an economist named Peter Temu followed this lead with the publication of a textbook in Swahili in his field. In recent years, popular novels such as detective stories and romances have been published (Fasold, 1984).

Literacy was also a key to Hebrew revival. Hebrew never died completely. It continued to remain widely known and used as a liturgical language primarily associated with religious ritual and the Bible. In the eighteenth century, it began to be used as a medium for modern *belles lettres*. Rabin notes that until the nineteenth century, many men could read and write Hebrew, so it was not be that difficult for them to begin speaking it (Cooper, 1989).

The number of Basque newspapers in Europe is also growing, indicating an increase in literacy. This is significant, because traditionally Basque is only an oral language. There are volunteers who have translated hundreds of specialized

volumes into Basque. These efforts have resulted in a Basque university, which now teaches a third of its curriculum in Basque. "For the first time in history, there are young Basque intellectuals who are embarking on academic careers in Basque rather than only in Spanish or French" (Fishman, 1991, p. 178).

A literacy project can also give a language permanence. Cherokee and Mohawk are two American Indian languages that have a long history or contact with Europeans and also a long literary tradition (Crawford, 1990). That these languages survive when other Amerindian languages surrounding them have not is a testimony to the staying power that literacy gives a language. In general, languages with literary traditions survive longer than languages with only oral traditions.

It is common for a dying minority language to borrow vocabulary and phonology from the dominant language. Unchecked, borrowing will eventually kill the minority language. Huave in Mexico and Dogrib in Canada are two language efforts that have used literacy to stop the inflow of Spanish and English loanwords, respectively. It may be an overstatement to say that the Huave project reversed a full-blown language shift, but it did guide the language back into the mainstream of Huave society. In 1982, Huave was spoken by 12,000 people in and around San Mateo del Mar (Grimes, 1988). The Summer Institute of Linguistics (SIL) conducts a project there consisting primarily of the publication of a New Testament and a dictionary. Huave literacy and the Huave dictionary have been instrumental in stemming the flow of Spanish loanwords into Huave. Because of the dictionary, the Huave people have been reviving and revising the way they speak. Huave also shifted into the domain of literature (Steve Marlett, personal communication, July 1996).

A 1987 SIL survey found Dogrib spoken by 2,400 indigenous people in northern Canada (Grimes, 1988). Although most Dogribs speak their language, there is almost universal bilingualism that has resulted in a lot of borrowing from English. The Dogrib language project consists of Leslie Saxon, a linguist, working together with a team from SIL. They have produced a grammar of Dogrib, some primers to help the people read their language, and a dictionary. These efforts had a healthy effect on the people's attitude toward their language. Seeing that it could be written down and had grammar, just like English, brought a sense of pride to the people (Leslie Saxon, personal communication, November 1993). The dictionaries were very popular as the people became interested in using the Dogrib words, rather than English loanwords. Although Dogrib was not in immediate danger of extinction, poor attitudes toward the language, widespread bilingualism, and incursion of English words were indicators that the language was threatened.

Literacy has also been part the Kaurna revival efforts in the plains of Adelaide, Australia. Kaurna is an aboriginal language that ceased being spoken on a daily basis in the 1860s. The last speaker died in 1929. Although it is almost unheard of for a language that has gone out of all use to be revived, Kaurna appears to be such a case. Since 1990 people have been attempting to reclaim, reassemble, and become literate in Kaurna. Since no sound recording are available, the only

basis for the project are documents recorded in the nineteenth century by German missionaries and other observers. They started with writing songs, and producing a songbook and cassette. Then Kaurna was introduced into the school programs. Momentum slowly grew, and now it is relatively common to use Kaurna to deliver speeches at openings of conferences and other events. Rob Amery from the University of Adelaide has witnessed well over 100 such speeches (1997). There are also signs that Kaurna is beginning to spread beyond the domains of education and speechmaking.

Although the emphasis for the Kwakwaka'wakw must be primarily on spoken Kwak'wala, it is also desirable for all Kwakwaka'wakw to be able to read and write the language as well. In particular, it is important that adult Kwak'wala literacy go hand in hand with school programs providing Kwak'wala literacy for children. In this way, the generations can be united through Kwak'wala literacy, rather than separated. Adult and child literacy can be a good way to strengthen the crucial intergenerational link. In order for adult literacy to take place, there need to be easy-reading literacy materials and a dictionary, and presently there is a lack of adult Kwak'wala literacy materials.

Immersion: Another common element of successful language efforts is that they do not teach the language in question through another language. Well thought out language efforts are careful to maintain environments where people can be immersed in the target language. Some languages that illustrate this are French, Catalán, Hebrew, Basque, Navajo, Maori, and Arapaho. Most frequently, the term "immersion" is used with reference to schools. For example, at the K-12 bilingual Rock Point Community School in Arizona some teachers teach only in Navajo. Kindergarten students are taught reading in Navajo, and in the early grades, all subjects, except English, are taught in Navajo (Reyhner, 1990).

Arapaho is a North American Indian language spoken in Wyoming and Oklahoma. SIL found 1,500 Arapaho speakers out of a population of 5,000 in 1977, which was very similar to the state of Kwak'wala. Assuming the decline continued at the rate of Kwak'wala's, there would probably be no more than 300 Arapaho speakers today. However, the language has had a small revival (an increase of a few speakers) owing to a nursery immersion project. Parents with children in the Arapaho immersion nursery are being paid a yearly salary to participate in the program and learn Arapaho themselves (Steve Greymorning, personal communication, May 1998). This project highlights the fact that there is no language that is so far gone that nothing can be done with it. It also shows the effectiveness of immersion, which can work even with the difficult polymorphemic North American languages (see also Greymorning, this volume).

The most successful language revival project, Hebrew, did not restrict the philosophy of immersion to schools but spread it quickly to all levels of society. Fishman writes, "The revival was based upon prior adult ideological commitment to spoken Hebrew and it was finally accomplished by creating Hebrew-as-a second-language settlements (=homes, families, neighborhoods) without even waiting for elementary schools to be organized" (1991, p. 245).

One of the most successful immersion efforts has been the development of immersion preschools in New Zealand. According to Bernard Spolsky,

> A meeting of Maori leaders, sponsored by the Department of Maori Affairs in 1981, suggested the establishment of all-Maori-language preschool groups, in which older Maoris, fluent speakers of the language, would conduct the programmes and make up for the fact that the majority of Maori parents could no longer speak their language. . . . The effect of the kohanga reos [language nests] cannot be exaggerated, where six years ago a bare handful of children came to primary school with any knowledge of the Maori language, now each year between 2000 and 3000 children, many of them fluent bilinguals, start school after having already been exposed to daily use of the Maori language for three or more years. (1990, p. 123).

Local Maori communities were in charge of organizing and implementing these language nests, and the New Zealand Government's Department of Maori Affairs provided some encouragement and financial support. The movement grew from four language nests in 1982 to nearly 500 in 1987. These preschools expose children to an all Maori language environment before they have been strongly impacted by English. The preschool program has been extended to completely Maori language elementary schools, and at the secondary level some courses are now taught in Maori. There is even a bilingual post-secondary institution, Makoura College, to instruct bilingual teachers (Spolsky, 1990).

To duplicate this Maori success for the Kwakwaka'wakw, language nests would have to be implemented fairly quickly, before the critical number of Kwak'wala speaking elders who could work in these preschools drops too low. Preschool activities can include free play, reading Kwak'wala stories and telling Kwak'wala stories using flannelboard figures, Kwak'wala singing (traditional and children's songs), walking to the beach, practicing Native art, eating, and playing inside with puzzles, playdough, blocks, and animal figures.

Maori language immersion efforts for adults have been in place since 1979. Week-long Maori immersion retreats take place on *marae*, which are Maori recreational and cultural community centers. Before starting a retreat students are expected to spend 10 to 12 hours on activities to learn some survival phrases in Maori because there is a complete voluntary ban on English during the retreat. Participants cope with the help of dictionaries and pantomime. These retreats can have 30 to 35 students and can be divided into three different fluency levels. The levels join for some activities and separate for others. Activities include everything from lectures, to sweeping the floor, to giving speeches. The immersion courses also emphasize physical activities and music. Students begin the day with exercises, move from class to class, wait on tables, clean the *marae*, and sing vigorous *waiata-a-ringa* or modern action songs. They also play games in Maori. Rangi Nicholson recalled, "At one course, we invented language for

playing softball. It was hilarious!" (1990, p. 115). Imagine playing soccer, a Kwakwaka'wakw passion, in Kwak'wala!

The goal is to reestablish Maori cultural norms of hospitality, caring, spirituality, and sharing—behavioral norms for which the spoken Maori language is considered essential. Maori adult immersion has been successful, resulting in adults speaking much more Maori. The programs have also become recognized in academic circles, and are part of the degree program at *Te Wananga o Raukawa*, a Maori college. One of the signs of progress in language revival is the formation of a Maori language pop band. The Maori language efforts have been a success that has defied all the experts' predictions; however the total number of fluent Maori speakers is still declining (Fishman, 1991).

Week-long Kwak'wala language retreats could be modeled after the Maori efforts. Beginning on Monday afternoon, there would be a time when the course philosophy and organization is explained in English so that people know what is going to happen during the week, and on Monday night a self-imposed ban could be put on speaking English and not lifted till the following Friday night. Saturday morning would be spent cleaning up and having a debriefing session where the students could say how they felt about the course. The course could conclude at noon with a closing ceremony and lunch. Planned activities could take place from 9:00 A.M. to 9:00 P.M., with appropriate lunch, supper, and coffee breaks. Every hour or so there would be a change of activity and/or change of classroom. Living in a retreat situation and speaking only Kwak'wala can be exhausting, so adequate time for rest and refreshment must be set aside. The ideal size of a class would be around 12 people. This would allow for sufficient student interaction, but would not be overwhelming. The retreats should have a balance of listening (lecture-type presentations), talking (small group activities and speeches), doing (total physical response activities, such as when the teacher tells you to touch your nose and you do), and writing (literacy).

Kwak'wala learning in an immersion setting should not be restricted to the classroom. Students should also help with the work. There should be various jobs that need to be done—helping in the kitchen, setting and clearing tables, cleaning bathrooms, sweeping, etc. For each job there should be a list of activities written down on a chart in Kwak'wala and hung on the wall. The students should be divided into support groups that rotate from job to job. The groups could be composed of people who are at different levels in their Kwak'wala ability, so that the less competent could learn from the more advanced and the advanced could learn leadership skills.

Each student could be working toward a short speech in Kwak'wala. Giving speeches is an especially appropriate domain of Kwak'wala, and topics could include a description of a potlatch, church service, or other gathering the students have been to recently. More advanced students could tell a short story, or talk about local, national, or international issues. The speeches would involve students in reading and writing as well as memorizing and speaking.

The Maoris realized it is important for the students to feel refreshed spiritually, mentally, and physically during the retreats. To attain this goal, they start

and end each day with prayer and have church services every morning. Nicholson notes the whole tone of the courses has improved with the strengthening of spirituality. Like the Maoris, the Kwakwaka'wakw are spiritual people. It would be wise to have an immersion program that would give the students a chance to work on their spirituality.

Nicholson notes that in the first Maori-immersion retreats: "The courses were long and the hours were long.... Sometimes an elder could be speaking at three in the morning. Many people left feeling mental and physical wrecks" (1990, p. 110). With good organization and a varied program, students need not feel this way. After the students finish the retreat and learn some Kwak'wala, there may be some reluctance to go back to English and a desire to continue learning Kwak'wala. At this point, it is possible to plan another retreat that builds on the first level. Eventually, there could even be three programs, all at different levels, held simultaneously. This would be a more efficient use of the facilities and the elders' time than having three separate retreats. Eventually it may be possible to take these retreats for university credit, which could provide an added incentive for more students to sign up for the courses. However, if Kwak'wala is recognized prematurely in the universities, it can entice the Kwakwaka'wakw into English speaking domains.

Media: Successful language efforts all have made efforts to use their language in the media—television, radio, newspapers, and so forth—and develop a body of literature to increase its prestige. A language effort that ignores the importance of the media encounters difficulties. The Working Group on Irish Language Television Broadcasting reported in 1987, "a language which does not have a substantial television service of its own cannot have a credible contemporary status; the stature of a language depends to a large extent on its presence and use in the media, and especially on television" (quoted in Benton, 1991, p. 1). Language efforts that make use of media and literature include Swahili, Amharic, Catalán, Hebrew, Yiddish, Sango, Tok Pisin, Irish, Basque, Frisian, Navajo, Me'phaa, and Maori.

In Canada there is a tendency to use modern methods and media like television, radio, videos, and computers prematurely in an attempt to revive the language. Possible examples of this tendency can include the National Aboriginal Computer Users Committee which was set up to exchange information in eleven indigenous languages (Chase, 1992); the Kwak'wala CD ROM project; the creation of Kwak'wala fonts on computer; the proposed interactive Kwak'wala computer game; and the Kwak'wala video disk talking dictionary project. Fishman (1991) also notes that most reversing language shift efforts have "great dictionary" projects that tend to become "sacred cows" or monuments in their own right, rather than stimulants leading to improved intergenerational mother tongue transmission. Furthermore, it is difficult to compete with English in these modern arenas. For instance, there will be better, or at least more professional, English television than Kwak'wala television because of the greater resources of larger groups, just as large high schools usually have better athletic teams than small high schools.

The Kwakwaka'wakw can take important steps in the realm of media to get people thinking and living in Kwak'wala. For example, it would be a good idea to put up Kwak'wala signs in as many locations as possible—streets, band offices, health centers, etc. At times the U'mista Cultural Centre in Alert Bay puts out newsletters in Kwak'wala. It would be worthwhile to try to get more Kwak'wala on the radio and local cable television and thus raise its prestige. Traditional songs and dances would be well suited for media such as radio, video, and television.

Modern expertise and technology can be useful if used correctly. Films and videotapes can help reverse language shift if they focus on home, family, child, and youth material (Fishman, 1991). A Kwak'wala computer communication network could be useful for keeping in contact with Kwak'wala speakers in the various villages and cities throughout the British Columbia coast. However, none of these ideas are directly related to reversing language shift at Fishman's stage seven. That is, they do not stop people from communication in English, and as such, might be considered "mere tokenisms." This being the case, it is wise not to spend an inordinate amount of time and resources on them. However, they give Kwak'wala prestige and exposure and thus make for good public relations.

Population: The last characteristic of successful revitalization programs is to establish a large population of speakers. The small Kwakwaka'wakw population is a drawback, but they can take comfort in the advantages of living in small communities—back-to-Kwak'wala advocates have the potential of being big fish in small ponds. A few dedicated people can make a big difference in reversing language shift to English in small communities.

A proposal for reviving Kwak'wala

Given the facts that Kwak'wala is a dying language and there have been successful language revitalization efforts for other indigenous languages at Fishman's stage seven (see the introduction to this volume for an explanation of Fishman's stages), I outline below some suggestions to revitalize the Kwak'wala language and in that way strengthen the people. To move towards Fishman's stage six requires creating Kwak'wala-speaking families and communities. There is a need to develop specific domains, set off by clear boundaries, where everyone in the community agrees to use Kwak'wala, and the community must offer some real rewards for Kwak'wala speakers.

At stage seven, elders are the most important language revitalization resource. However, activities involving the elders are useful for the purposes of reversing language shift only if they lead to intergenerational transmission. It is of critical importance to have activities that strengthen the links between elders and their children, grandchildren, and great-grandchildren, as the Maori preschools do. Activities must be linked to the ongoing, normal, daily family and community functions, particularly to the daily life of the children. At stage seven, questions about the correct usage of Kwak'wala should be deferred, and all resources should be spent on promoting opportunities to communicate in Kwak'wala—without undue attention to the "proper" form. Although "pure

Kwak'wala" may be encouraged, people speaking broken Kwak'wala, Kwak'wala with a lot of English borrowings, or divergent dialects should not be made to feel embarrassed. The emotional cost brought on by infighting over these problems is far too high. First, Kwak'wala must be put back into homes and communities, and then the matter of a standard may be looked at again, but it should be a flexible standard, not one that is rigidly enforced (Fishman, 1991).

Another mistake language efforts, especially those involving literacy, can make is to put too much emphasis on expanding vocabulary and domains of use too soon. There are a lot of domains, such as computers, which are not served by the Kwak'wala language. There is the temptation to fill in new, modern domains immediately by coining new Kwak'wala words. After all, few people want to speak an old-fashioned language. However, Kwak'wala cannot be made suitable for serving new functions out of thin air. If new Kwak'wala words having to do with office work are coined by some individual in isolation from a real office, they are not likely to be used by anyone. However, if a community of Kwak'wala speakers decides they want to use Kwak'wala instead of English in their office, Kwak'wala may gradually start replacing English in this domain and the community of speakers themselves will invent or borrow the words they need to conduct their work.

Fishman maintains that, "pinpointed goals must be focused upon first, goals that are oriented toward much smaller societal units such as families, clubs or neighborhoods, or to speaking (rather than writing), or to schools (rather than businesses), or to kindergartens (rather than high schools), etc." (1991, p. 12). When Hebrew was resurrected, there was an emphasis on the spoken versus written language. When coining new words, the members of the Hebrew Language Academy began with carpentry and kitchen terms, where people could put them into immediate use.

The most common error taken by language revival efforts for languages in stage seven is to go immediately to stages four and five of Fishman's model, which have to do with education, before addressing the needs of the foundational stages that have to do with family, neighborhood, and community. It is attractive to target schools, because they are relatively easy to plan for and control, and it is customary to focus on teaching the language as a means of reviving it. If Kwak'wala classes and bilingual education in general produce unsatisfactory results, the Kwak'wala educational system is blamed instead of the "mainstream [society] that defines it, warps it, starves it, threatens it and then blames it for not curing the problems" (Fishman, 1992, p. 399) or the people who are simply not speaking the language. A case in point is the T'_isalagi'lakw School in Alert Bay, where most of the Kwak'wala instructors are discouraged to the point of quitting. In 1992 the program evaluator noted that a common question asked by parents is, "How come the children have been taking Kwak'wala and by the eighth year they still just blurt out words... can't converse?"

Even if students learn Kwak'wala in school, they will soon forget it if they can't use it in their family or community. At stage seven, a strategy for language learning is important, but even more important is a strategy for language reten-

tion outside of schools. There must be reasons to speak Kwak'wala outside of the school. The educational system will serve the cause of reversing language shift best when Kwak'wala is reinforced before the children start school and after they have completed their schooling In addition, for schools to be successful, it is necessary to train Kwak'wala speakers to become teachers, but this too must be done with a view toward intergenerational transmission. If the goal is not intergenerational transmission, training teachers may help the individuals, but it will not reverse the slide toward English. The teachers may well realize that there is more money to be made in the English-speaking world and join the mainstream. Such was the result of the Kwak'wala Teacher Training Project that ended in May 1986. Eight of the nine students who completed the program went on to work toward a Bachelor of Education at Simon Fraser University. It was noted, "Perhaps the greatest contribution of the KTTP was in giving the students enough confidence to take the Simon Fraser program, even though it meant that qualified people were absent from the community" (*First Nations Language Teacher Training Directory*, 1989). Instead of strengthening the Kwak'wala language, it moved some potential leaders of a "back-to-Kwak'wala" movement further into English-speaking domains.

Leanne Hinton's "Master-Apprentice" model is one way to develop Kwak'wala teachers by first developing their ability to speak the language through working directly with elders. Her model is designed to get young adults (two to three years before the usual age of childbearing) to live with the elders who are native speakers, exchanging assistance to the elderly for Kwak'wala immersion (either all day or for several hours per day) for at least a year or two (Joshua Fishman, personal communication, March 1997). In particular, young women should be targeted, because the mother's role in intergenerational transmission is far more important than the father's. Fishman (1991) points out that during these early years, modern parents require birthing instruction, parenting instruction, child care, and child health provision.

For every Kwak'wala speaker, there are probably four semi-speakers, aged from 30 to 60. These people often feel ashamed of their own lack of mastery of Kwak'wala, and though they may understand the language well, many refuse to speak it. The semi-speakers are one group to focus on to revive the language. Leanne Hinton has suggested organizing a series of potlucks for semi-speakers, where they would speak only Kwak'wala without fear of ridicule (personal communication, April 1997). Manno Taylor, a semi-speaker in Alert Bay, suggested a "Kwak'wala club" serving the same purpose.

A language restoration effort such as proposed in this paper need not be backward-looking. Indeed, Kwak'wala must be updated to face the twenty-first century. This process of modernizing the language can go hand in hand with Kwak'walizing modern services. Revival can work best with a combination of old and new ideas, taking the best from English and Kwakwaka'wakw society. A common slogan of the Australian outstation settlements is "two ways" or "both ways," which implies that it is not total isolation from the modern world that is desired, but, rather, an ability to retain that which is selected from the traditional

alongside that which is adopted from the outside and to do both under community control (Fishman, 1991).

Initial implementation and reaction

My family and I moved to Alert Bay in January 1995, and we immediately became involved quite extensively with the Kwakwaka'wakw. I began pastoring the Pentecostal church and substitute teaching at the T'_isalagi'lakw School, my wife began working as a nurse, and my children began attending a local school and daycare. In the summer of 1995, I took a second language acquisition course at the University of North Dakota, and proceeded to use the method taught there to learn Kwak'wala myself. In an effort to implement Kwak'wala in the community, I spoke to several key people in Alert Bay about my ideas—the chief, the principal, and other leaders. I also expressed my thoughts to the Kwak'wala Steering Committee, a group with representation from all Kwakwaka'wakw communities. In a show of solidarity, they have given the Steering Committee responsibility for overseeing the task of reviving Kwak'wala. My talk to the Steering Committee generated some interest and questions.

I began the implementation process by making drafts of my master's thesis available to anyone who wanted one. At people's request, I also made a three page summary of my thesis and dropped off copies for the U'mista newsletter, the Musgamagw newspaper, and the T'_isalagi'lakw School newsletter. They were printed in the Musgamagw and the U'mista newsletters, and the Musgamagw and T'_isalagi'lakw newsletters have carried additional, shorter articles explaining my ideas. When I finished my thesis, I left copies of it in the Namgis Health Centre waiting room, and about a dozen were taken home by Kwakwaka'wakw.

The best method for spreading the ideas was oral. Many villagers were enthusiastic and agreed wholeheartedly with what I said. They frequently expressed the concept that without the language the culture is dead, and they listened attentively as I point out the steps necessary to revive Kwak'wala. Many community members express a desire to learn Kwak'wala. Some say they used to be fluent as children but have lost it. These enjoy listening to Kwak'wala. Others were not fluent as children but gained fluency as adults—by spending time with elders.

Because I speak rudimentary Kwak'wala, I am a curiosity to the villagers. They seem to enjoy speaking Kwak'wala to me—especially in front of their younger family members who do not understand. On the whole, old and young alike express positive feelings for my learning Kwak'wala, and people seem eager to teach me. There are many family units in Alert Bay where only the older members speak Kwak'wala. I came into these homes and facilitated sessions in which the Kwak'wala speakers taught the rest of their family. Most people in the school and in the community have been very positive about my ideas, including my philosophy and my teaching methods. One concept that is a little touchy is that of solidarity—particularly the issue of relationships and marriages outside of the tribe. My statement that mixed marriages do not bode well

for Kwak'wala was greeted with approval by people who had married other Kwakwaka'wakw. People who had relationships with non-Kwakwaka'wakw, however, were either silent, or told me to "butt out."

With my encouragement, a woman spearheaded Kwak'wala services beginning in the fall of 1996 at the Pentecostal church in Alert Bay. They were initially fairly successful, with around a dozen people attending. Enthusiasm waned, and now the services continue in a modified format. More sporadically now, from three to 16 of us meet in one of the two Kwak'wala speakers' homes. This case underscores the difficulties of promoting language for its own sake. It did not seem worthwhile to this Kwak'wala speaker to teach the language itself, but she was willing to teach the Word of God in Kwak'wala.

The young adults' reaction was revealing. A young carver said he had heard some youths talking among themselves, saying that if I could learn Kwak'wala, so could they. He was excited that they were challenged by me, an outsider to the community, speaking Kwak'wala. He felt this would motivate them to learn. Interestingly, he didn't express a desire to learn it himself. Another man said, "We want our kids to learn Kwak'wala, and if the way to do that is to learn it ourselves, then I guess that's what we'll have to do." The teenagers of Alert Bay reacted in various ways. The common thread was that there was not the motivation required to learn Kwak'wala. However, they did express a sense of solidarity and desire to learn Kwak'wala. One said, "We've been trying to learn Kwak'wala for years and here you show up and learn it in one year—it pisses us off!" Another youth, who was angry at me for kicking her out of class, told the principal I had no business speaking Kwak'wala, since I was not Indian. A third teen said, "I used to really not like you…used to think, 'Who does he think he is, speaking Kwak'wala?'"

Most community members expressed a desire to revive Kwak'wala but were not willing to do much about the matter personally, preferring instead to make it the responsibility of the schools. The low motivation at the family and community level is an alarming sign, because it is on this level that all successful language projects are based. Community interest did result in my being hired by the T'_isalagi'lakw School in Alert Bay. In February 1997, I signed a three-month contract to develop curriculum and to promote Kwak'wala, particularly among the children. I feel I was given the job because of the proposal described in my master's thesis and, more importantly, because I am the first person in decades to learn Kwak'wala. I began teaching almost immediately, using a fluent Kwak'wala speaking teacher and a second language acquisition model taught by Anita Bickford at the University of North Dakota. This method is a hearing-driven language acquisition method based on ideas set forth in various manuscripts by Greg Thomson (1992, 1996) and in books by Stephen Krashen, including his *Principles and Practice in Second Language Acquisition* (1982). The method emphasizes having sessions with fluent Kwak'wala speakers and guiding the speakers through the use of objects and pictures to slowly increase the students' knowledge of Kwak'wala. It also requires the students to tape-

record all the new vocabulary and sentences learned in each session, listen to the tapes frequently, and write up the contents of the tapes in journal form.

My first students were the children from grades one to seven who are taught Kwak'wala for half an hour per day. Soon after, I also started teaching Kwak'wala twice a week to adults, mostly school staff. In an effort to create a sense of personal responsibility, I printed a line from a Maori hymn on the syllabus of the class, "Send a revival, start the work in me." After two months, I began co-teaching with a young Kwakwaka'wakw who had become familiar with the teaching method. My goal was to first familiarize as many Kwakwaka'wakw as possible with Kwak'wala and then to promote Kwak'wala literacy. At the end of the adult class, all new vocabulary and phrases were taped three times in Kwak'wala and once in English. During my tenure at the school, this tape was played over the public address system twice a day (a total of about 15 minutes).

In Alert Bay my teaching method worked well and was initially received enthusiastically by the students. After about two months, however, only about one quarter of the children remained interested in learning Kwak'wala. The rest disturbed the class to the point where little learning could continue. Kwak'wala classes for the adults proceeded along the same lines. For the first month there was a lot of excitement, with at least twenty adults showing up. All were very keen on learning Kwak'wala and expressed a desire to use it more and more in the school. The principal even announced that in the future salary raises would be tied to how well people had mastered Kwak'wala. However, the adults were very reluctant to speak or write Kwak'wala. By the second month, people were expressing frustration and embarrassment because they felt ridiculed by the Kwak'wala helpers. Within three months, interest faded, and the class dwindled to four people.

Some of the Kwakwaka'wakw most interested in Kwak'wala revival (three 19/20-year-olds and one older Kwak'wala speaker) came with me to the University of North Dakota in the summer of 1997 with the idea they would learn Anita Bickford's method of language acquisition, practice it on the Kwak'wala speaker on campus, and then continue using the method to acquire more Kwak'wala and become increasingly literate when they returned home. Two of the three young people turned down a trip to Holland to take the course. The bands provided enough funds for transportation, room and board, and a few hundred dollars spending money to support the Kwak'wala acquisition project at the University of North Dakota.

The opposition encountered in implementing the ideas of in my master's thesis clearly show how deep-rooted is the sentiment that the salvation of Kwak'wala is in the hands of the schools. Any initiative I planned that was not entirely academic was considered suspect by many and fought by some. Even though I frequently stated that the emphasis should be on families and community, most of my efforts at language revitalization were channeled away from the community and into the school.

Knight Inlet retreat

One Kwak'wala event that was successful was a six-day trip by 16 of us to the remote head of Knight Inlet, about a nine-hour boat ride from Alert Bay. Although the proposal for 100% Kwak'wala immersion did not go according to plan, we did study Kwak'wala intensively for four days, and there was a lot of progress in learning to understand and write the language. While at Knight Inlet, we lived in a eulachon fish camp with about 100 other Kwakwaka'wakw and were able to observe traditional fishing, hear Kwak'wala legends (in English), play traditional games, and learn how the Kwakwaka'wakw used certain plants.

The idea of having a language immersion camp at Knight Inlet generated a lot of excitement and suggestions. We were asked to put notices in the U'mista newsletter and on cable television, informing the community about the upcoming trip. Other suggestions included holding a bingo to raise money and going door to door asking for donations. There were many people who gave us advice on how to prepare for the trip, and they lent us cabins and donated food. Most of the positive comments about the trip had less to do with learning Kwak'wala and more to do with being Indian and doing something traditional—in other words, solidarity. This experience shows again how language is seldom learned for its own sake.

The Cultural Committee stirred up a lot of opposition to the Knight Inlet trip. They, as well as other community members, thought it was not a good idea. I was made to jump through many hoops and get permission from many people, and I was given many discouraging messages. The message on cable television was a sticking point, because we had not asked all the right chiefs for permission. But the trip went ahead successfully, and many community members are saying we should repeat it. One reason the Knight Inlet experience was so successful was that it was an integration of education and family/community. The cost was shared equally between the T'_isalagi'lakw School and the community members who attended, and there were scheduled classes that everyone attended.

The Kwakwaka'wakw seem to be reluctant to commit to a long-term language project. Thus, another reason the Knight Inlet experience was perceived as successful was because it was a short term initiative—it lasted less than a week. Perhaps a camp like this one represents the best hope for Kwak'wala revival. Since this initiative received so much community support, maybe more camps, and more frequent camps, could be organized. Perhaps trips like these could become regular events, being scheduled more and more frequently and lasting longer and longer. Frequently scheduled Kwak'wala camps have the potential to give birth to Kwak'wala-speaking communities—the goal of every successful language project.

The future

Kwak'wala legends are full of references to surprise treasures, called "d_ugwala." Bourdieu (1982, pp. 24-25) compares language to a treasure and people to store houses, each holding different amounts of the treasure. For several decades, the Kwakwaka'wakw have been in the process of losing the trea-

sure of the Kwak'wala language. This paper has proposed a way to refill the storehouses with treasure, to refill the people with Kwak'wala. If matters continue as they are now, the future of Kwak'wala is very dubious. To predict how long Kwak'wala will last, one need only calculate the remaining life span of the youngest Kwak'wala speakers—a few decades, at the most. Kwak'wala will not go the way of Hebrew, which died as a spoken language but remained in use as a literary language.

Unless the Kwakwaka'wakw are willing to radically change the way they approach Kwak'wala, unless they are willing to spend the time and effort required to learn and promote Kwak'wala, it will die completely in a few decades. At the moment, there does not seem to be enough motivation at the community level to do what needs to be done to revive the language. However, there is still a window of opportunity in which to revive the language. There are still older speakers who are actively integrated into the community. There are a few young people of childbearing age who are learning to speak Kwak'wala. If these young people meet with Kwak'wala speakers regularly and expend the necessary time and effort, they will learn Kwak'wala. If they then go on to raise their children only in Kwak'wala, the life of Kwak'wala will be extended another generation.

Note: This paper is based on the author's 1997 University of North Dakota Master's Thesis *Reversing Language Shift: Can Kwak'wala Be Revived.* The entire thesis can be accessed at http://www.und.nodak.edu/dept/linguistics/theses/theses.htm

References

Amery, Rob. (1997, May 27). Revival of 'dead' languages. Published correspondence, *Bulletin of the Society for the Study of Indigenous Languages of the Americas*, No. 49.

Bentahila, Abdelâi, & Davies, Eirlys E. (1992). Convergence and divergence: Two cases of language shift in Morocco. In W. Fase, K. Jaspaert, & S. Kroon. (Eds.), *Maintenance and loss of minority languages* (pp. 197-210). Studies in Bilingualism, Vol. 1. Amsterdam: John Benjamins.

Benton, R. (1991). Notes on the case for Maori language television. *New Language Planning Newsletter, 5*(4).

Bourdieu, Pierre. (1982). *Ce que parler veut dire: l'economie des exchanges linguistiques.* Paris: Fayard.

Chase, Steve. (1992, July 19). Articles in *Winnipeg Free Press.*

Cooper, Robert L. (1989). *Language planning and social change.* Cambridge: Cambridge University.

Crawford, James. (1990). Language freedom and restriction: A historical approach to the official language controversy. In J. Reyhner (Ed.), *Effective language education practices and Native language survival* (pp. 9-22). Choctaw, OK: Native American Language Issues Institute.

Dawson, Flora. (1992). Letter to director. *U'mista*.

Fasold, Ralph. (1984). *Sociolinguistics of society.* Oxford: Basil Blackwell.

First Nations language teacher training directory. (1989). Vancouver, BC: First Nations House of Learning.

Fishman, Joshua. (1980). Minority language maintenance and the ethnic mother tongue school. *Modern Language Journal, 64*(2), 167-172.

Fishman, Joshua. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages.* Clevedon, UK: Multilingual Matters.

Fishman, Joshua. (1992). Conference summary. In W. Fase, K. Jaspaert, & S. Kroon (Eds.), *Maintenance and loss of minority languages* (pp. 395-403). Studies in Bilingualism, Vol. 1. Amsterdam: John Benjamins.

Galois, Robert. (1994. *Kwakwaka'wakw settlements. 1775-1920.* Vancouver: University of British Columbia.

Grimes, Barbara (Ed.) (1988). *Ethnologue* (11th Ed.). Dallas, TX: Summer Institute of Linguistics.

Krashen, Stephen D. (1982). *Principles and practice in second language acquisition.* New York: Prentice-Hall.

Nicholson, Rangi. (1990). Maori total immersion courses for adults in Aotearoa/New Zealand: A personal perspective. In J. Reyhner (Ed.), *Effective language education practices and Native language survival* (pp. 95-106). Choctaw, OK: Native American Language Issues Institute.

Pandharipande, Rajeshwari. (1992). Language shift in India. In W. Fase, K. Jaspaert, & S Kroon (Eds.), *Maintenance and loss of minority languages* (pp. 253-276). Studies in Bilingualism, Vol. 1. Amsterdam: John Benjamins.

Paulston, Christina. (1992). Linguistic minorities and language policies. In W. Fase, K. Jaspaert, & S. Kroon. (Eds.), *Maintenance and loss of minority languages* (pp. 55-80). Studies in Bilingualism, Vol. 1. Amsterdam: John Benjamins.

Reyhner, Jon Allan. (1990). A description of the Rock Point Community School Bilingual Education Program. In J. A. Reyhner (Ed), *Effective language education practices and Native language survival.* Choctaw, OK: Native American Language Issues Institute.

Spolsky, Bernard. (1990). Maori bilingual education and language revitalization. *Vox.* Issue No. 4.

Taylor, Elizabeth. (1992, Jan. 11). Planning committee meeting. Notes in *U'mista.*

Thomson, Greg. (1992). *Developing a corpus of comprehensible text.* Unpublished essay.

Thomson, Greg, et. al. (1996). *A few simple ideas for new language learners.* Unpublished essay.

Wardhaugh, Ronald. (1992). *An introduction to sociolinguistics* (2nd ed.). Oxford: Basil Blackwell.

Using TPR-Storytelling to Develop Fluency and Literacy in Native American Languages

Gina P. Cantoni

This paper describes the Total Physical Response Storytelling (TPR-S) approach to teaching second languages. TPR-S is an extension of James Asher's Total Physical Response (TPR) immersion approach to teaching second languages that has been very popular with indigenous language teachers as it allows students to be active learners, produces quick results, and does not involve the use of textbooks or writing. TPR-S strategies utilize vocabulary first taught using TPR by incorporating it into stories that students hear, watch, act out, retell, revise, read, write, and rewrite. Subsequent stories introduce additional vocabulary in meaningful contexts.

This paper discusses TPR-Storytelling (TPR-S) as a promising approach to teaching a Native American language to Native students who have not learned it at home. I am grateful to my former student Valeri Marsh for the opportunity to examine TPR-S training materials and strategies and for her input into this article.

An interest in exploring methodologies suitable for teaching indigenous languages and in having teachers receive training was expressed by the Native educators who met in Flagstaff, Arizona, at the First and Second Symposia on Stabilizing Indigenous Languages (Cantoni, 1996). Some of the participants gave demonstrations of the Total Physical Response (TPR) in their small-group meetings, and several teachers mentioned that TPR was used in their schools as an introductory approach to Native language instruction.

What is TPR?

Popularized in the 1960s and 70s by James Asher (1977), TPR represented a revolutionary departure from the audiolingual practice of having students repeat the teacher's utterances from the very beginning of their first lesson and whenever new material was introduced later on. Asher recommended that beginners be allowed a silent period in which they learn to recognize a large number of words without being expected to say them. The vocabulary presented at this level usually consists of action verbs and phrases such as "walk," "run," "touch," "point to," "give me," "go back," and the names of concrete items such as "floor," "window," "door," "mouth," "desk," "teddy bear," and "banana." About 150 words are presented in the first five or six weeks, and at least three new terms per lesson can be expected to become part of a learner's active vocabulary during any lesson, even though they may not say them until later.

The teacher begins by uttering a simple command such as "walk to the window," demonstrating or having a helper act out the expected action, and

inviting the class to join in. Commands are usually addressed first to the entire class, then to small groups, and finally to individuals. When a few basic verbs and nouns have become familiar, variety is obtained by adding qualifiers such as "fast," "slowly," "big," "little," "red," "white," "my," and "your." Since the students are not required to speak, they are spared the stress of trying to produce unfamiliar sounds and the consequent fear of making mistakes. Stephen Krashen (1981) considers lowering the "affective filter" an important factor in the language acquisition process. Although the teacher is continuously assessing individual progress in order to control the pace of introducing new material, this assessment is unobtrusive and nonthreatening. A learner who does not understand a particular command can look at others for clues and will be ready to respond appropriately the next time or the one after.

TPR is a continuous application of the "scaffolding" strategy (Vygotsky, 1986) with the teacher, and then the class, supporting the learning of a new word by demonstrating its meaning and then withdrawing assistance when it is no longer needed. For example, to teach the word "gato" for "cat" the Spanish teacher may use a toy or a picture; later, the word "gato" becomes part of the scaffolding for teaching modifiers such as "big," "little," "black," or "white."

During TPR, the teacher is always providing comprehensible input, the cornerstone of Krashen's (1985) theory. New items are introduced within the framework of items taught in previous lessons or available from the learners' preexisting knowledge. In teaching the word "gato," the teacher is introducing a new label (an alternative to the label already available, i.e., "cat") but not a new concept—the learners are already able to identify the toy or the picture as representing a certain familiar creature.

TPR has been proven very effective for the initial stages of second language instruction, but it has limited usefulness for more advanced learning. It emphasizes commands, leaving out the forms used in narratives, descriptions, or conversations, and it is predominantly teacher-initiated and directed, with little opportunity for student creativity and little attention to individual interests. More importantly, TPR promotes only the learners' receptive language skills and ignores the productive ones, which are essential to real communication.

After a few weeks, some students spontaneously begin to give commands to each other. This indicates readiness for a gradual evolution from the receptive to the productive mode. At this point, TPR-Storytelling (Ray & Seely, 1997) provides easy-to-follow guidelines for further progress towards more complex levels of language proficiency.

What is TPR-S?

The storytelling strategies of TPR-S utilize the vocabulary taught in the earlier stage by incorporating it into stories that the learners hear, watch, act out, retell, revise, read, write, and rewrite. Subsequent stories introduce additional vocabulary in meaningful contexts. The children are already familiar with stories from other school and preschool experiences, and now they are exposed to this familiar genre as the teacher presents it in a new language with an abun-

dance of gestures, pictures, and other props to facilitate comprehension. After hearing a story, various students act it out together or assume different roles while their peers watch. The teacher may retell the story with slight variations, replacing one character with another, and engaging different students in the acting. Another technique introduces some conversational skills, as the teacher asks short-answer and open-ended questions such as "Is the cat hungry?", "Is the dog big or little?", and "Where does the girl live?" (Marsh, 1996).

Students are not required to memorize the stories; on the contrary, they are encouraged to construct their own variations as they retell them to a partner, a small group, or the entire class, using props such as illustrations, toys, and labels. The ultimate goal is to have students develop original stories and share them with others. A whole range of activities may be included, such as videotaping, drama, creating booklets for children in the lower grades, designing bulletin boards, and so forth. At this point TPR-S has much in common with other effective approaches to reading and writing instruction.

Both TPR and TPR-S are examples of language teaching as an interactive learner-centered process that guides students in understanding and applying information and in conveying messages to others. TPR as well as TPR-S apply Cummins' (1989) interactive pedagogy principle. At first the children interact silently with the teacher and indicate comprehension by executing commands and then by acting out stories. They are active participants long before they are able to verbally communicate with the teacher and with each other.

TPR as well as TPR-S also apply some of Krashen's (1985) most valuable pedagogical principles. The learners' affective filter is kept at a low level by a relaxed classroom atmosphere, where the stress of performing and being judged is kept to a minimum. At the beginning of the storytelling stage, the students' initial response is not oral, but kinesthetic: When they begin to speak, the teacher responds to the content of their messages rather than to their grammatical accuracy. In TPR as well as in TPR-S the teacher provides comprehensible input without using L1; she relies on the learners' preexisting knowledge of the world and uses gestures, actions, pictures, and objects to demonstrate how one can talk about it in another language.

TPR and TPR-S also make abundant use of the pedagogical strategy of scaffolding (Vygotsky, 1986). The teacher or a peer assists the learner during tasks that could not yet be performed without help. The scaffold is removed as soon as it becomes unnecessary; new support is then made available for the next challenge. Cooperative learning can be seen as a particular kind of scaffolding provided within a group where students help each other (Steward, 1995; Tharp & Gallimore, 1988).

How can TPR-S promote Native language learning?

Materials and guides for TPR-S are available for teaching Spanish, French, German, and English as a Second Language. The procedures outlined in these sources could be adapted to the teaching of any language, including Native

American ones, if educators, school districts, and community members wanted to engage in such a project.

Several Native American teachers and teacher-trainers have created TPR lessons to introduce their tribal language to the children who have not learned it at home, and these efforts are usually very successful; they allow the learners to indicate comprehension non-verbally, keeping the affective filter low. However, these TPR strategies develop receptive language skills and ignore the productive ones.

Many Native children can understand their tribal language because they hear it spoken at home. These children can be very useful during TPR lessons, acting as assistants, demonstrators, and group leaders. There is reason to rejoice over the fact that they can understand their elders and appreciate their teachings and stories, but what will happen a few years from now when the old people are gone and these children are grown up and should carry on the task of culture transmission? If they can understand but not speak the tribal language, how are they going to teach it to the next generation?

This situation is especially serious in the case of languages such as Hopi or Zuni that are spoken only in a particular community, whose members cannot import speakers from other parts of the world, a choice which is available to Hispanics, Slovenes, Chinese, and other groups. It is essential that Native children learn to use their tribal language instead of just understanding it. In some cases, their reluctance to speak may be owing not only to the pressures of an English-speaking society but also to unreasonable expectations of correctness and accuracy. Children who have suffered ridicule or embarrassment because they mispronounced or misused a word are likely to avoid the risk of further unpleasantness and take refuge in silence. This problem was brought up repeatedly during the First and Second Symposia on Stabilizing Indigenous Languages (Cantoni, 1996), and it was recommended that all attempts to use the home language be encouraged and rewarded but never criticized.

The increasing scarcity of Native-language speakers has assigned the responsibility of Native language instruction to the school, instead of the home or community. When the Native language teacher is almost the only source of Native language input, and the instruction time allocated to Native language teaching is limited, the learners are not to blame for their limited progress in fluency and accuracy.

In addition, Native children face a more severe challenge than English-speaking children who are learning French or Spanish. Research indicates that the extent to which comprehensible input results in grammatical accuracy depends not only on the quantity, quality, and frequency of available input, but on the "linguistic distance" between the learners' L1 and the target L2 (Ringbom, 1987). There is evidence that students learning Spanish through TPR-S made high scores on national grammar tests, but Spanish is an Indo-European language, just like English, whereas Native American languages have grammatical systems unrelated to those of English.

Consequently, Native language teachers who expect their students, or at least some of them, to master the tribal language at a level of correctness that will satisfy the most exacting local standards should provide them appropriate guidance, not just input. As Rivers (1994) has pointed out, there is a crucial difference between comprehension and production. The meaning that a learner constructs from input is drawn from semantic clues and is not stored in memory in its full syntactic complexity. It is possible to comprehend and remember input with little attention to syntax by relying on preexisting knowledge, context, and vocabulary (Van Dijk & Kirtsch, 1983). This phenomenon is known as "selective listening" and often occurs even when the teacher responds to an ungrammatical utterance with one that models the correct form (Van Patten, 1985). This kind of polite error correction, which is recommended for interactive journals, does not necessarily work all the time for all learners; teachers might need to resort to other forms of intervention, such as those described in the literature on the writing process.

In conclusion, educators interested in developing a Native language program or modifying their existing one could explore what TPR-S has to offer for their particular situation. TPR-S consultants could be hired by a school district to work with Native language speakers in developing materials and lesson plans similar to those used for teaching Spanish or ESL.

TPR-S evolved from the grassroots efforts of interested and creative teachers rather than from the application of theoretical models. Its reputation has spread by word-of-mouth, from one satisfied practitioner to another, from one school to the next (Marsh, 1997). Training new personnel to use this methodology is not difficult or excessively time-consuming.

TPR-S emphasizes a positive, collaborative, and supportive classroom climate in which Native American children can develop increasingly complex skills in speaking, reading, and writing their tribal language. In addition, the stories, illustrations, and audio cassettes students can produce in TPR-S are a valuable addition to the scarce pool of Native-language materials available today.

References

Asher, J. J. (1977). *Learning another language through actions: The complete teacher's guidebook.* Los Gatos, CA: Sky Oaks.

Ausubel, D. P. (1968). Cognitive structure and the facilitation of meaningful verbal learning. *Journal of Teacher Education, 14*, 73-94.

Cantoni, G. P. (Ed.). (1996). *Stabilizing indigenous languages.* Flagstaff, AZ: Northern Arizona University.

Cummins, J. (1989). Language and literacy acquisition in bilingual contexts. *Journal of Multilingual and Multicultural Development, 10*(1), 17-31.

Johnson, D. W., & Johnson, R. T. (1986). *Learning together and alone: Cooperation, competition and individualization* (2nd ed.). Needham Heights, MA: Allyn & Bacon.

Krashen, S. D. (1981). *Second language acquisition and second language learning.* Oxford: Pergamon.

Krashen, S. D. (1985). *The input hypothesis: Issues and implications.* New York: Longman.

Marsh, V. (1996). *¡Cuéntame!: TPR Storytelling: Teacher's manual.* Scottsdale, AZ: C.W. Publishing.

Marsh, V. (1997). *Personal communication.*

Ray, B., & Seely, C. (1997). *Fluency through TPR Storytelling.* Berkeley, CA: Command Performance Language Institute.

Ringbom, (1987). *The role of first language in second language learning.* Clevedon, UK: Multiligual Matters.

Rivers, W. M. (1994). Comprehension and production. In R.M. Barasch & C.V. James (Eds.), *Beyond the Monitor Model* (pp. 71-95). Boston: Heinle & Heinle.

Slavin, R. E. (1990). *Cooperative learning.* Needham Heights, MA: Allyn & Bacon.

Steward, E. P. (1995). *Beginning writers in the Zone of Proximal Development.* Hillsdale, NJ: Erlbaum.

Tharp, R. G., & Gallimore, R. (1988). *Rousing minds to life.* Cambridge, UK: Cambridge University.

Van Dijk, T. A., & Kritsch, W. (1983). *Strategies of discourse comprehension.* New York: Academic.

Van Patten, B. (1985). Communicative value and information processing. In P. Larson, E.L. Judd, & D.S. Messerschmitt (Eds.), *On TESOL* (pp. 89-99). Washington, DC: TESOL.

Vygotsky, L. S. (1986). *Thought and language.* Cambridge, MA: Massachusetts Institute of Technology.

Documenting and Maintaining Native American Languages for the 21st Century: The Indiana University Model

Douglas R. Parks, Julia Kushner, Wallace Hooper,
Francis Flavin, Delilah Yellow Bird, Selena Ditmar

The five papers collected here describe the history of the Arikara Language Project and its implementation in the White Shield School in North Dakota, the Nakoda Language Program at Fort Belknap College in Montana, and the development of tools at the American Indian Studies Research Institute at Indiana University for computer language documentation and the creation of curriculum materials for these and other projects. The papers describe a multimedia dictionary database program and multimedia language lessons developed for the Arikara, Assiniboine, and Pawnee languages, and the issues involved in developing computerized language lessons for an endangered or moribund language. The multimedia dictionary database was designed to develop "talking" dictionaries that incorporate sound recordings of words in dictionaries. The primary goal of the multimedia lessons is to provide a means of studying a language by listening to native voices when there are no longer speakers to serve as language models. The lessons use sound recordings and corrective feedback and follow principles of second-language teaching and learning. Both aspects of the program help document and preserve the language.

Genesis of the Project

Douglas R. Parks

Today, many Native American communities have developed a language maintenance or language revival program. Among those programs, approaches vary in fundamental ways, but all have the same general goal: to maintain and perpetuate the language of a particular community by teaching it to younger generations. Generally that goal—sometimes explicit, at other times implicit—is to make speakers of individuals who are not speakers of a native language. To achieve that end, each program and the approach it takes depends on several variables:

- the number of contemporary speakers of the language, that is, the size of the community of speakers;
- the degree of community interest in language maintenance, that is, whether support for the program is strong, mild, or apathetic; and
- the talents and interests of the individuals who develop and implement the program—their educational background and skills, and the level of their knowledge of the language.

These variables have produced programs that differ dramatically in teaching materials, in pedagogical approach, and in effectiveness. Some programs take a more formal linguistic approach, constructing materials patterned on those used traditionally for teaching foreign languages; others take a more community-based approach, using materials or lessons created by a community member—often a fluent speaker—or utilize some form of the immersion model.

The program and approach that we will describe here is based on a linguistic model that has evolved over several decades and continues to develop as community circumstances and technology change. My efforts began in 1965, when, as a linguistics graduate student, I began fieldwork with Pawnee, a Caddoan language spoken in Oklahoma. At that time there were perhaps 200 speakers, although the number of fluent speakers was considerably less. (Today there are fewer than six fluent speakers.) My goal at the time was to work with the most fluent elders to document the language in as much detail as possible in order to compile a dictionary and a collection of native language texts (traditional stories) as well as to write a grammatical description of the language.

In 1969 an Arikara woman visiting a Pawnee friend with whom I worked invited me to come to North Dakota. She suggested that I document her language, just as I was doing with Pawnee, since no one had ever recorded Arikara and she knew several elders who would be willing to work with me. She succeeded in convincing me, and in 1970 I began that endeavor. Again, my goals for Arikara were the same: to compile a dictionary and collection of texts and to write a grammar. Those goals, I might add, are still integral to the project, since they provide the essential reference works for language maintenance and revival efforts as well as for preservation of a community's linguistic heritage.

In 1974, the project took on a new dimension when I was offered a position to head the North Dakota Indian Languages Program at Mary College (now Mary University) in Bismarck. The purpose of that program was to develop curriculum materials for supporting language instruction for the languages native to the state: specifically, for Arikara, Hidatsa, Mandan, and two Sioux dialects, Yanktonai (Dakota) and Teton (Lakota). The program itself had been established the previous year, just as Native American studies programs were beginning to develop both nationally and in the state. The Indian Languages Program was in large part the result of a survey carried out in the institutions of higher learning in North Dakota in which Native American students had ranked native language courses as their number one priority.

With limited staff—three linguists, one curriculum writer, and three native language resource people—our program was able to focus on only three languages, all spoken on the Fort Berthold Reservation: Arikara, Mandan, and Hidatsa. In each case we realized that to develop effective teaching materials we first had to document the languages by recording lexical and grammatical data and analyzing them. Only then could we create effective teaching materials. Hence, our efforts were balanced between linguistic documentation and curriculum development.

The most elaborate set of materials to come out of the program was that for Arikara. We wrote a post-secondary level textbook, *An Introduction to the Arikara Language*, that would support a two-year course in North Dakota colleges, including the developing Fort Berthold Community College. The other materials were designed to provide guidance and content for teachers at the White Shield School, which is at the seat of the Arikara community on the Fort Berthold Reservation. For the elementary and secondary levels we produced teacher's guides that would enable teachers in the White Shield School, as well as in other schools on the Fort Berthold Reservation, to offer yearlong courses. We also published a set of bilingual readers for use in elementary classes. Later, we compiled other materials, including an Arikara student dictionary. All of those materials were, of course, in printed format.

Significantly, many of the teachers at the White Shield School are members of the community, but none speak Arikara. For that reason, when the language program was established in 1976, the teachers had to rely on elders coming into the classroom to model pronunciation and serve as language resource people. The program in the school was staffed by two individuals, a younger teacher's aide who structured the language classes, and an elder who provided oral language material. The written materials served as instructional guides and resources.

During the 1980s and continuing to the present, the White Shield School has continued to offer instruction in Arikara in its elementary school. Over the past several years, the instructor has been an elder who is a native speaker and who now works independently of a teacher's aide. As of Fall 1998, however, the language program has been assigned to Mrs. Delilah Yellow Bird, who formerly was the teacher's aide and who now, after earning her bachelor's degree in education, is a teacher in the school. She will initiate a new, expanded language program that will utilize many new materials, especially those discussed below.

Today, the situation at White Shield is significantly different from what it was two decades ago, when Arikara language instruction was first begun in the school. There is now only one elder who has been teaching Arikara in the elementary school. She is the *only* person in the community who is a fluent speaker and who is able to teach in the school on a regular basis. Once she is no longer able to teach, there will be no fluent speakers who can provide classroom instruction. Future teachers will be individuals who learned Arikara as a second language, and, in order to develop their own language skills, they will have to depend on the documentary materials recorded today from the last fluent speakers of the language. Thus the critical need is to document the Arikara language as extensively as possible and to develop innovative and more effective learning tools while there are still fluent elders who can assist in creating them.

In 1995 I proposed to the White Shield School Board that it support revision of the Arikara language textbook, which was by then out of print. The textbook would be more effective if it were divided into four one-semester volumes for use in the secondary school and if it had more written exercises, as well as an accompanying set of cassette tapes. More significantly, though, multimedia technology was coming into its own at that time and was being applied to educa-

tional projects, so I further proposed that we develop a model for multimedia language lessons that would include sound and images to engage students interactively in language learning. The idea behind this proposal grew out of a recent development in my documentary linguistic work: namely, that linguists today should be utilizing current sound technology to preserve endangered languages in *oral* as well as in written form. In 1995 I began work on multimedia reference dictionaries of Pawnee and Arikara that would incorporate high-quality sound recordings of all the words in the dictionaries. It was a big step beyond the goal of printed dictionaries. Since users could hear native-speaker pronunciation of the words as well as see related illustrations, the multimedia dictionaries promised to serve as reference works that would be accessible to a wider audience and that would be more versatile than traditional printed ones.

The idea to create teaching materials that also incorporated sound recordings was an obvious next step. Sound recordings offer the only possible way to perpetuate the voices of contemporary native speakers of Arikara. Multimedia lessons enable students of present and future generations to hear and interact with those native voices, providing as closely as possible the language resources that students have had in the past but otherwise would not have in the future when the elders of today, the last fluent speakers of the language, are no longer alive.

During 1996, the first year of our multimedia language lesson project, we hoped to create a set of lessons that would serve a one-semester course. Those intentions, however, proved unrealistic. There was no model that we could follow for the multimedia lessons, and there was no software program that would easily enable us to create them. In other words, we had to develop our own model, utilizing a new software program and adapting it to our needs. The results of that first year of development were modest: two prototype units. On the surface, those units did not demonstrate much in quantity, but in reality they embodied prodigious research and development by a team of individuals with various computing, educational, and linguistic skills. The White Shield School Board provided additional funding during 1997, and with that support we have been able to complete an elaborate set of 16 lessons and at the same time we have been able to simplify the developmental process. Those lessons are discussed below by Julia Kushner.

At the same time that the lessons were being developed by our team at Indiana University, I have continued to expand the documentary linguistic record of Pawnee and Arikara by developing more elaborate multimedia dictionaries for those languages, including extensive archives of linguistic sound recordings and illustrations for dictionary entries. Here the effort is to create reference works that go beyond most dictionaries of Native American languages, incorporating more written information than one normally finds and, more significantly, incorporating spoken sound and illustrations. Here, too, there was no software program designed specifically for the creation of multimedia dictionaries, and there was no model to follow. Consequently, we have had to create our own.

That story will be told next by Wallace Hooper and Francis Flavin, who have been integral to the development of our dictionary databases.

Over the past ten years my colleague Raymond DeMallie and I have also collaborated on a similar documentary project with Assiniboine. Currently, we are working with Fort Belknap College in Harlem, Montana, to develop similar printed and multimedia teaching materials to support an Assiniboine language program in the college, and recently we have also begun a joint project with the Pawnee Tribe of Oklahoma to provide similar materials for teaching Pawnee in the local high school as well as in adult language classes.

Each of the programs shares the following goals:

- extensive, innovative language documentation that includes the creation of written and sound archives of Native American languages, thereby preserving for the future as much material as possible in a variety of formats;
- use of those documentary records as the basis for creating an array of teaching materials that will help preserve and revitalize these languages;
- use of the latest technology to create both documentary records and teaching materials; and
- a multidisciplinary approach to the creation of teaching materials that combines methods and insights from linguistics, anthropology, psychology, and education to produce the most effective learning tools possible.

What ties these goals together is a commitment to language preservation going hand-in-hand with language teaching, and a belief that utilizing current technology, including software research and development, enables us to produce more valuable documentary records and more effective teaching tools.

The White Shield Arikara Language Program

Delilah Yellow Bird (*Schituta*)

My name is Delilah Yellow Bird, and I am an enrolled member of the Arikara tribe on the Fort Berthold Reservation in west-central North Dakota. I am a teacher in the White Shield School, which is the seat of the Arikara community on the reservation. (There are two other tribes on Fort Berthold: Mandan and Hidatsa.)

In 1975 our school board instituted an Arikara language program in the White Shield Elementary School. The community wanted our language taught in the school as a means of preserving and reviving it. There were perhaps as many as 200 speakers of our language at that time, but no one under the age of 60 spoke it fluently.

The board directed that the program would be limited to the elementary school, specifically the primary grades, and that instruction would be for a period of 15 minutes per day. The staffing would consist of a teacher's aide, who was not a fluent speaker, and an elderly speaker who was fluent. Curriculum materials and teacher training came from the North Dakota Indian Languages Program at Mary College, Bismarck, North Dakota, where curriculum development was an ongoing activity (as described by Douglas Parks above).

During the first eight years our approach was basically an oral one. The elders who came into the classroom served as models, pronouncing words and sentences that students would repeat. That routine had limited results. The positive ones were that students learned to imitate speakers and hear Arikara actually spoken. In other words, they became familiar with the sounds and with the elementary vocabulary of Arikara, but, on the negative side, no one became a speaker.

Beginning in the mid-1980s we introduced writing into classroom instruction. We used a variety of media for this: coloring books with animal, plant, and object names; puzzles; and calendars. The introduction of writing had several positive effects. One was that, for the first time, our language was being written, and the community for the first time came to see that it was possible for us to have a written language. It also made teachers in the school aware that Arikara language instruction was a serious matter and that made teachers think about what they could do to help the program develop in positive ways.

Beginning in 1984 our school also purchased its first computers for classroom use, and we began to experiment with the use of computers in language instruction. We did this by creating the calendars, stories, and other activities. The introduction of computers is important because it marked the beginning of a period when we began our efforts to combine computer technology with bilingual education—teaching English to Limited English Proficient (LEP) students as well as experimenting with ways to utilize computers in teaching Arikara.

Over the first twenty-year period the Arikara language program was supported by a variety of funding. Initially, funding for the program came from school funds, but later it came from a variety of federal funding sources, specifically from Title IV (Indian education) and Title VII (bilingual education) grants. Once we moved to a program that depended on grants, the program experienced less stability. We had to write grants and then wait, depending on those that were actually funded. With this approach to maintaining a language program, the instructional program moved from one target group to another, as one grant targeted primary grade students, another upper elementary grades, and another high school students. It was impossible to establish a comprehensive program that progressed from kindergarten up to and through high school.

At the beginning of 1997 I was placed in a new position entitled Bilingual Education Coordinator and Teacher. My job now is to construct a comprehensive Arikara language program in our school system, one that includes preschool, elementary, and secondary levels and includes adults in the community as well. In short, I have been charged with the task of developing a program that serves

both our elementary and secondary schools and the community. The two major hurdles that we face are:

- There are no longer any native Arikara speakers who can come into the classroom. There are a precious few elders who speak our language, but their health prevents them from coming into the school regularly. Moreover, in another five to ten years there will be no fluent speakers remaining. Thus, the overriding question is how can we maintain the knowledge and voices of our few remaining speakers and see them shared with future generations of Arikaras?
- How can we construct a language instructional program that will serve the needs of our Arikara community over the coming decades? We are at a point in time when we either accomplish something for the future now, or we leave the community with very little.

The use of multimedia computer technology, we feel, offers us the best hope of preserving the speech of our fluent speakers in a way that students can actually learn and profit from significantly. Extensive sound recordings are essential. But no less essential are well-designed curricula that will take us beyond learning just words and a small number of sentence patterns. The multimedia Arikara lessons described here, together with the other resources being developed at Indiana University, offer a set of resources that we believe offers the solution we need.

As a final word, let me say that I have shared initial versions of the lessons with school board members, students at both White Shield School and Fort Berthold Community College, and parents and elders. The reaction was extremely positive. But what was most significant was the fact that adults and even elders were not intimidated by the computer. They used it easily. We have great hope.

Nakoda Language Program at Fort Belknap College

Selena Ditmar

I feel good to have come a long way to talk my tribe's language. Our young people now have forgotten or do not know how to speak our language. Today the Nakoda people are pitiful; we all speak the English language. Today we are gathered here to think about how we can teach them in a good way. We have all lost our Indian language so today we are here to talk about it.

The main objective of the Nakoda Language Program is to create curriculum materials for the Nakoda Language classes at Fort Belknap College. In addition, the Program strives to provide supplementary language materials to be integrated in other classes at Fort Belknap College, including Nakoda History and Culture. The current program is a collaborative effort between Fort Belknap

College and Indiana University with both institutions providing valuable and unique resources.

Approximately 25 to 30 people speak Nakoda at Fort Belknap. The language is often used for visiting at the senior center, and speakers talk whenever they have the opportunity. As a means of sustaining and reinvigorating indigenous language use on the reservation, Fort Belknap College requires students to take three credits (one quarter) of either Gros Ventre (Atsina) or Nakoda. Prior to 1996, the inaugural year of the Nakoda Language Program, language teachers at Fort Belknap had to teach the classes orally based on their individual knowledge of Nakoda. There were a few different writing systems in use, but no one used them consistently. Conversely, at Indiana University, Douglas Parks and Raymond DeMallie had collected words and stories for use in a dictionary about 15 years ago. They needed to find a way of bringing the material back into the community.

The average number of students in the Nakoda class is nine per quarter and approximately 30 students per year. Currently there are three quarters of Nakoda language instruction offered at the college. The largest classes are in the first quarter, and later classes have fewer students. One of the greatest successes of the program has been evening classes for community members. They seem to be the most interested in the classes and more motivated to apply themselves.

As part of the Nakoda Language Program, we are creating a textbook specifically for the classes at Fort Belknap College. It will include sufficient material for one full year of Nakoda instruction. We currently have eight completed units and have sketches for two more. Eventually there will be 12 units; four units will be covered each quarter. In order to reinforce pronunciation and provide additional practice, we have taped the first few lessons, and plans have been made to tape more.

We are also developing a workbook to accompany the lessons. Previously we had exercises in the lesson book, but we have decided that the workbook is easier for students to use since they do not have to mark in their texts or write on a separate sheet of paper. It also allows for more exercises to be included that reinforce both vocabulary and grammar covered in the text. So far this year, the students have responded well to the exercise books, often moving ahead of what is assigned.

Verbs frequently pose the greatest difficulty to students studying Nakoda. It is important to know if verbs are stative or active and whether pronomial subjects prefix or infix on the verb. Because of this, we decided that a verb paradigm book would be helpful for students. Last spring we came up with approximately 250 everyday verbs in Nakoda. The book shows the full conjugation for each verb in the four most common forms: the simple statement, a negative statement, a potential or future statement, and a negative potential statement.

There are plans to develop the lessons further for the students using new technologies. We have begun taping the lessons using a DAT recorder (Digital Audio Tape). These tapes include both the vocabulary and the conversations that begin each lesson. The recordings are currently being converted into sound

files to be used in multimedia lessons that follow the model developed for Arikara lessons at Fort Berthold. Fort Belknap has a full computer lab that will be able to use the CD-ROM technology. The hope is that the multimedia lessons will encourage students to practice Nakoda, especially those who may have been able to take one semester of the language, but have not been able to take any more because of degree requirements or scheduling conflicts. The goal is also to encourage students to become familiar with new computer technologies. In addition to the language lessons and verb paradigm dictionary, we are currently developing a multimedia reference dictionary that will serve the future. While the program is for the college, it is a community effort, involving most of the Nakoda speakers in our community. Non-college students have made recommendations in regard to the lesson plans. There is a strong interest in the language among our people.

The Development of Linguistic Tools at the American Indian Studies Research Institute

Wallace Hooper and Francis Flavin

The American Indian Studies Research Institute (AISRI) at Indiana University is engaged in projects to document several Native American languages and to work with Native communities in developing language-teaching materials. An integral part of our approach is to develop tools that allow scholars and language teachers to work with linguistic data. Each year AISRI employs some 20 individuals, many of them graduate students working part-time, others faculty and full-time professional staff members. AISRI's projects are based on the collection, processing, and analysis of three basic kinds of language data: vocabulary, oral and written text, and historical information.

Collection

The first step in the documentation process is recording language data from speakers. After vocabulary and other materials are elicited during interview sessions, the words and sentences are simultaneously transcribed into notebooks and tape recorded. Because a spoken language is best represented by a variety of speakers, both male and female voices of various age groups, we have worked with as many elders and other proficient speakers as possible. Students at Indiana University have entered into the computer linguistic data that were recorded by Douglas Parks from native speakers of Arikara, Skiri and South Band Pawnee, Assiniboine, and Yanktonai Dakota. These data are the foundation for dictionaries that have been under development from 1986 through the present. For the first several years, AISRI used ProTem's DOS-based database program Notebook II to store lexical data. However, owing to the limitations of the DOS user-interface and the numerous disadvantages of "flat-file" database structure, the decision was made to migrate to a database program that could handle and process data in a more sophisticated way and that could offer multimedia functions.

We chose Microsoft's *Visual FoxPro*, which has multimedia capabilities, the ability to handle complex relationally-structured databases, and a powerful set of programming features. Moreover, by migrating our data to a program that is both an industry standard and is produced by a major software company, we have ensured the long-term viability of our software.

Over the past three years a primary component of AISRI's activities has been the collection and processing of sound-recorded data to be integrated with the text data for these languages. Language material is recorded by consultants on Digital Audio Tape (DAT), which provides recordings at 44 KHz (44 thousand samples per second). The high sample rate is important for language recordings because it captures the full range of frequencies, including the characteristic whispered sounds of Arikara. The sound data recorded in the field are later archived and indexed on DAT, with copies also preserved on CD-ROM.

Another important element in AISRI's language documentation program is its focus on collecting and translating oral and written native language texts, including texts created at the beginning of this century by George Sword and George Bushotter, both Lakota speakers, and by Roaming Scout, a Skiri Pawnee. Parks has published a four-volume collection of Arikara narratives that he recorded from elders during the 1970s and also has collections of Skiri and South Band Pawnee texts resulting from his work in the late 1960s. Together, these native texts will make an important contribution to the documentation of their respective languages.

Processing

Once the data have been collected in both written and audio format, the next step is to convert them to computer format, after which the data are ready for processing. As described above, field work produces two types of data, written data and sound data. Both are input into a computer where they are refined independently, then combined by means of an appropriate database.

The written data are entered into a program called the Indiana Dictionary Database (IDD). This is the program created in *Visual FoxPro* by AISRI to serve as a lexical database. IDD is designed as a relational database with the primary table being the "entry form" table (figure 1) and with other lexical data being stored in various "associated tables." Associated tables contain data that are directly related to the entry form of the word. IDD includes associated tables for glosses, examples, idioms, paradigmatic forms, grammatical forms, historical citations, semantic classes, cross references, and a variety of other lexical categories (figure 2). Significantly, there are also associated tables for sound recordings, images, and video recordings. Each associated table contains several fields, and each field holds a unit of lexical data that is relevant to the category that the table represents. For example, the fields for a single entry in the sound table include the sound recording, part of speech, a translation, text source, name of consultant, a "comments" field, and the sound file name (figure 3). Because IDD is a relational database, it allows for "one-to-many" relationships: e.g., the

Figure 1. Sample of IDD Entry Form Screen

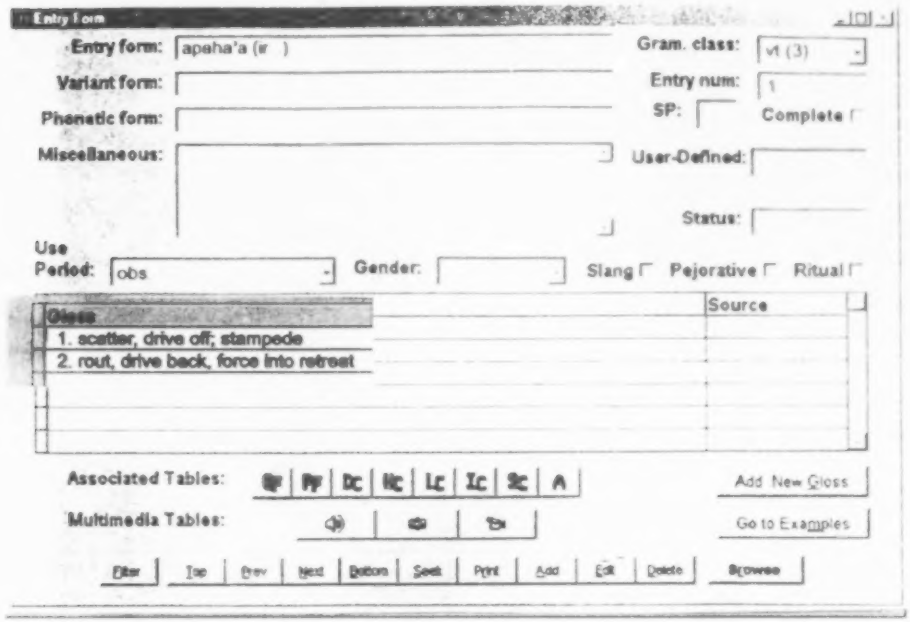

Figure 2. Sample of IDD Paradigmatic Forms Screen

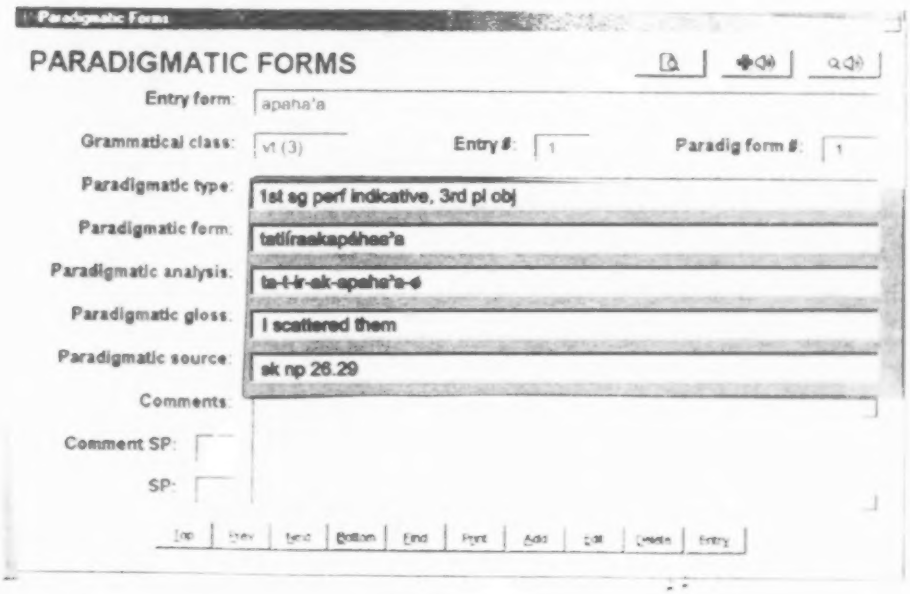

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Figure 3. Sample of IDD Sound Screen

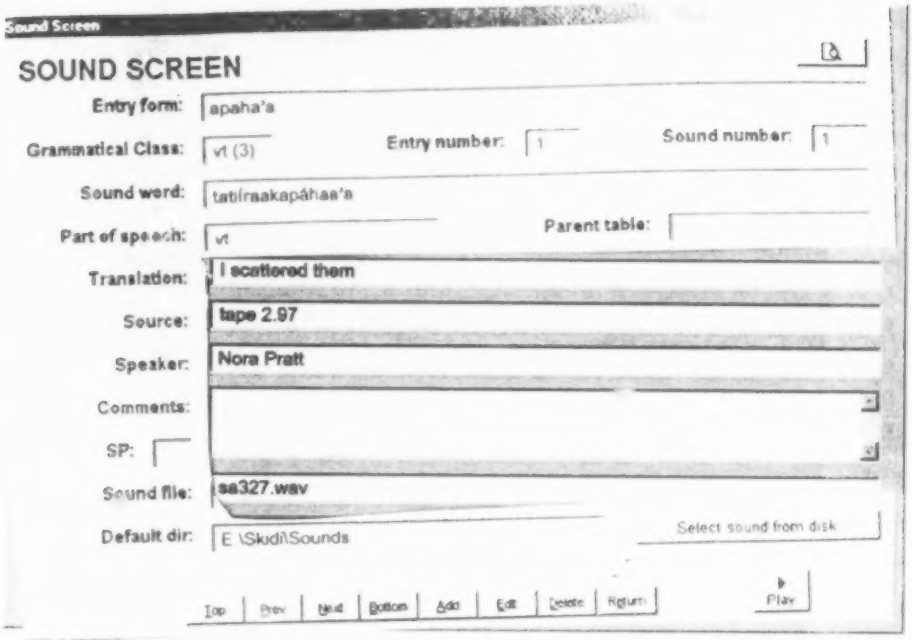
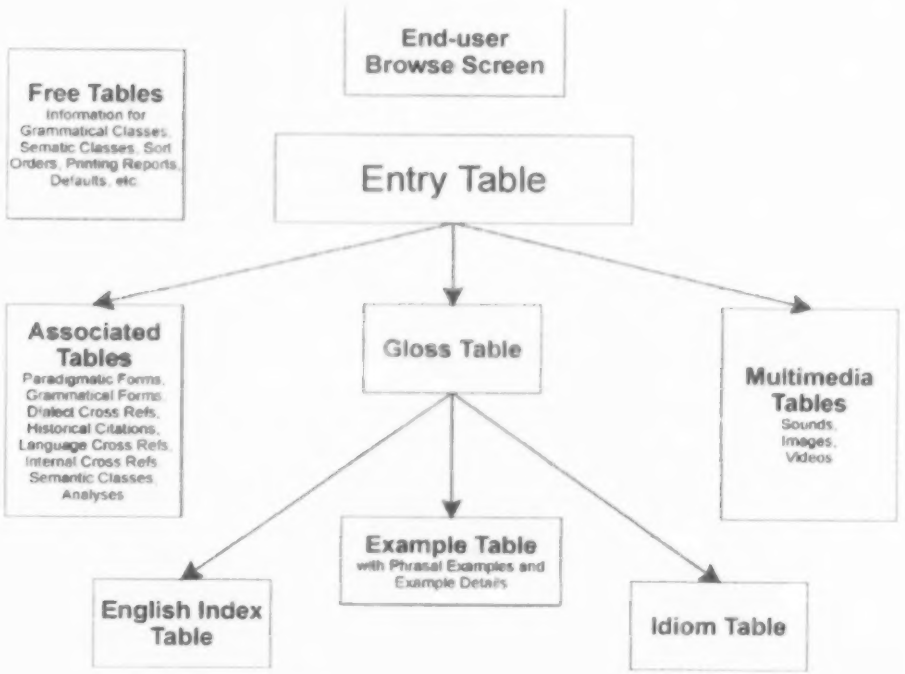


Figure 4. Simplified Schematic of IDD Data Table Structure


End-user Browse Screen
Free Tables
Information for Grammatical Classes, Sematic Classes, Sort Orders, Printing Reports, Defaults, etc.
Entry Table
Associated Tables
Paradigmatic Forms, Grammatical Forms, Dialect Cross Refs, Historical Citations, Language Cross Refs, Internal Cross Refs, Semantic Classes, Analyses
Gloss Table
Multimedia Tables
Sounds, Images, Videos
Example Table
with Phrasal Examples and Example Details
English Index Table
Idiom Table

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user is allowed to associate each entry with infinitely many sound records—likewise for glosses, examples, paradigmatic forms, and so forth (figure 4).

IDD also has sophisticated searching and printing functions. The search functions allow the user to perform complex queries on the data, and the printing functions allow the user to print out either the entire dictionary or some user-defined subset thereof. It is also important to note that the user may specify the order in which fields are printed and the font attributes—such as bold, italics, and small caps—that are assigned to each field. Further, the user may generate output to WordPerfect, RTF, HTML, or ASCII text formats, which allow the dictionary material to be quickly translatable into either camera-ready copy or pages for the world wide web.

Both the written data and the sound data from DAT recordings are integrated into IDD, as well as into other programs, such as the multimedia lessons described below by Julia Kushner. However, incorporating sound data into the programs requires special steps in order to transfer the sound data to computer format and refine the quality of the recordings. In its sound lab, AISRI has three computers with the capability of performing professional quality re-digitizing of DAT signals into WAV and AIFF files for use in computer environments. The equipment allows us also to digitize from cassette tape and reel-to-reel tape. We have access to materials in the Archives of Traditional Music at Indiana University, including early twentieth-century cylinder recordings. We are using Sonic Foundry's *SoundForge* as the main processing tool, but we also use *Digital Audio Restoration Technology* (DART) software to restore historical recordings and enhance their audio quality.

The *SoundForge* sound processing software is capable of creating graphs of the amount of energy at each frequency for each moment of time in a recorded utterance. Until recently, phoneticians have had to make major investments or rely on older software to produce such graphs. Although personal computer hardware and software are not inexpensive, processing sound clips on desktop computers has proven to be a cost-effective and powerful solution.

AISRI is also developing software to produce interlinear texts as part of its efforts to process written and oral texts. An interlinear format is standard for the presentation of traditional narratives and other linguistic texts. In such a format, the native base text is printed above lines of annotation, frequently a literal English gloss on one line and an English free translation on another line. The Institute's first software development project created an annotated text formatter based on the standard marking convention developed by the Summer Institute of Linguistics. The AISRI's program can change typefaces line by line and adjust the style and size of the font. Sometimes linguists add other lines of annotation. For example, in the George Sword Lakota texts the base line is a transcription of Sword's original, while the second line is a retranscription in modern orthography, followed by a line containing a word-by-word literal translation in English. With the capability to add extra lines of annotation, a morpheme-by-morpheme analysis can also be provided.

Analysis

As they currently stand, the sound archives and the Indiana Dictionary Database are valuable analytic resources in their own right. The sound archive contains a large amount of voice data that, when converted into PC format, can be subjected to a variety of software-based audio analysis routines. IDD allows the user to store lexical data and relate them to other lexical data in linguistically appropriate ways. Furthermore, IDD allows the user to perform sophisticated searches and to create subsets of the dictionary by filtering the data based on various querying criteria.

In the near future, AISRI plans to develop an interlinear text processor to retranscribe, gloss, parse, and analyze sound-recorded texts. This processor will be used to produce copy for publication, and it will also generate electronic interlinear texts that incorporate multimedia data. As we envision it, the text processor would be integrated with IDD, which will allow IDD and the interlinear text processor to share lexical data. This is important because IDD's data would be available to translators and analysts as they work on their texts, and, just as important, the linguistic material from the text can be automatically incorporated into IDD. Furthermore, the interlinear text processor would also be able to play sound clips and link them to passages in the text. The interlinear text formatter will be a valuable addition to the Institute's analytical tools and will produce output in both printed and electronic formats.

Conclusion

Future generations are going to need sound and written archives as well as dictionaries and textbooks. The smaller the number of active speakers still using the language, the more critical these extra resources become for anyone who is trying to teach or learn the language or who wishes to improve their proficiency.

Students must hear the words spoken by proficient speakers engaged in active discourse to become comfortable with the language. Grammars, dictionaries, and readers—perhaps as multimedia "talking books"—as well as music on audio cassettes or CDs are all valuable tools for learning. Students also need a record of the histories and other stories passed down by earlier speakers of the language, so they can hear the discourse of their parents and grandparents.

Software tools for the central tasks of dictionary building and annotated text processing were not initially available when AISRI began its language documentation and preservation efforts; consequently, we designed our own set of software tools. The tools needed to collect texts and basic linguistic data, build language archives, and then produce the readers, dictionaries, sound recordings, and textbooks are now all available and currently in use. The introduction of high-quality audio and video recording equipment together with the introduction of the multimedia computer has made it possible to develop, organize, and manage extensive collection and publication work. The tools we are developing at AISRI are both essential and invaluable in our efforts to document and preserve endangered languages.

Tradition and Innovation: Multimedia Language Preservation

Julia Kushner

The Arikara Multimedia Language Lessons were created in response to the White Shield School community's desire to have the Arikara language taught in their schools. The White Shield School is a K-12 school in Roseglen, North Dakota, located on the Fort Berthold Reservation. Currently there are no Arikara language teachers in the school, however, until last year there was one elder who taught basic words and simple phrases to students in the lower elementary grades.

The United Nations (Doyle, 1998) distinguishes between *endangered* languages, meaning those whose youngest speakers are middle-aged and children are no longer learning it, and *moribund* languages, or those that are spoken only by the elderly. Arikara is a moribund language, being spoken fluently by fewer than 10 elders. According to Fishman's (1991) 8-level classification system, Arikara is a Stage 8 language, that is, just one step from total extinction. In a Stage 8 language, "most vestigial users of [the language] ... are socially isolated old folks and [the language] ... needs to be re-assembled from their mouths and memories and taught to demographically unconcentrated adults" (p. 88).

Strategies usually recommended for language teaching and learning are not possible for a moribund language such as Arikara. For example, the successful immersion programs developed by the French Canadians have proved successful for some American Indian languages such as the Arapaho (Greymorning, 1997). However, this model cannot be used at White Shield since there is no community of speakers, textbooks, newspapers, radio programs, movies, or other "authentic" language experiences in which to immerse students. The language nests that have had such great success for the Maori (Smith, 1987) depend on elders who are physically and geographically able to come to school on a regular basis. For the same reason, the success of the Total Physical Response method (Asher, 1996; Littlebear, 1997) and mentoring programs (Brooks, 1998) are not viable solutions for students of Arikara.

A new model for teaching dead, endangered, or moribund indigenous languages needs to be devised. First, most American Indian languages lack the materials, tradition, prestige, and backing of publishing houses that languages such as Latin or Ancient Greek have. Second, the linguistic structures and sociolinguistic uses of Native American languages, including Arikara, are unique and complex, especially when compared to European or even other STLs (Seldomly Taught Languages), such that those models may not even be applicable. See Cumming, Burnaby, Hart, Daigle, and Corson (1995) for more on this issue.

Thus, the Arikara Multimedia Language Lessons are a response to the problem of how to design a language course for a complex language with no teachers, few materials, and even fewer speakers. The Arikara model is promising: the language has been meticulously documented by a linguist (Parks), and the lesson designs are informed by the literature on second language acquisition and computer-assisted language learning.

An ambitious project such as the Arikara Multimedia Language Lessons requires the close collaboration of a number of people. First and foremost is the expertise provided by elders who are fluent in the language. This project was fortunate to have as collaborators elders such as Ella Waters, Alfred Morsette, and Angela Plante, who, beyond being fluent speakers of Arikara, were also gifted in their ability to describe the nuances and uses of their language. The project was made possible by the support of the Arikara people and the White Shield School District. Essential to the success of the project were Lloyd Fandrich (Superintendent, White Shield School), Delilah Yellow Bird (Project Coordinator), and Max Dickens (White Shield School) as well as current and previous members of the White Shield School Board.

Design Rationale

Lesson Design

The Arikara Language Lessons follow a traditional, grammatical approach to instruction. This design is informed by the constraints described above and is supported by the language learning research. Realistic goals include preservation of the voices of the elders, Arikara's oral traditions and narratives, culture, and ceremonial uses of the language. In the absence of an Arikara-speaking community, it is judicious to fully document the language's phonological, syntactic, and semantic rules and its sociolinguistic and pragmatic uses, so that students of Arikara have the tools necessary to fully understand and maintain those traditions.

There is currently a debate in the literature regarding grammar teaching in particular. Some argue that grammar should never be *taught*; instead, students should learn rules implicitly by observing and interacting in naturalistic settings (Krashen, 1981; Krashen & Terrell, 1983). Other scholars point out that although some learners are facilitated by this kind of "data gathering," there are people who learn best by "rule forming" (Hatch, 1974, as reported in Larsen-Freeman, 1997).

A growing body of empirical research demonstrates the beneficial effects of grammar instruction in language learning. Ellis's work has focused on grammar teaching as "consciousness raising," that is, as making students more observant of the grammatical structures they come across and how the structures relate to meaning. Ellis (1995) calls this kind of exercise an *interpretation activity*. Note that the emphasis is on attending to input, rather than correct production. Others have found that students provided with explicit grammatical instruction progress more quickly than those without it (Pieneman, 1984), and that the effects are lasting (VanPatten & Cadierno, 1993). Finally, there is some evidence suggesting that repeated practice may be effective precisely because it leads to the internalization of rules (Paulston, 1992) rather than because it leads to appropriate response patterns as previously proposed by behaviorist theories.

The "rule-forming" approach taken in the Arikara Language Lessons is also supported by research on at-risk students and second-language learning. Students who have difficulty reading and writing in their first language often find it similarly difficult to learn a second language. Ganschow, Sparks, and Schneider (1995) describe several high schools which have had success teaching second languages to these at-risk learners using the MSML or *multisensory, structured, metacognitive language* program. The Arikara Multimedia Language Lessons, like the MSML, emphasize a metacognitive (self-monitoring) strategy to learning, a strategy which includes explicit attention to the rules and structures in language.

The technique focuses precisely on teaching three rule systems: (1) phonology and orthography, (2) grammar or syntax, and (3) the vocabulary and morphology of the target language. In so doing, students are learning and improving two languages at once: their first language (i.e., English) and the second (i.e., Arikara). The Arikara Language Lessons repeat practice with a word, rule, or concept in several modalities: visually, aurally, and verbally. Similarly, students get repeated practice in reading and writing in the new language. Exercises of this nature serve to reinforce students' metalinguistic skills (Schneider, 1996) and general verbal abilities.

Many Native American youths are monolingual English speakers with poor reading and writing skills and are classified as *semi-lingual* or not having mastered any language entirely (Leap, 1993). Therefore, these students' general linguistic abilities—including their English ability—may benefit from a program such as the Arikara Language Lessons.

Lesson content and structure

The Arikara Multimedia Language Lessons are adapted from and accompany a written text. These 16 lessons are primarily designed for high-school students, college students, and adults; however, they also can be adapted for middle- and primary-school aged children. Each lesson addresses six different segments of language learning and engage the student in a variety of tasks. The linguistic segments are: Written and Spoken sounds, Vocabulary, Conversation, Grammar, and Sentence Patterns. In addition, each lesson has an Arikara Culture segment that describes various aspects of Arikara history, culture, and society. The lessons are fully interactive, employing auditory, visual, and kinesthetic features. Pictures of people, places, items, and cultural artifacts are incorporated into the lessons, as are music and video. Each of the six segments is described below.

Written and Spoken Sounds. Students are introduced to basic phonetics to teach them to produce sounds that are not found in English and to have them more easily understand the need for an Arikara orthography. Afterward, students listen to sounds in isolation and embedded in words spoken by a native speaker of the language, record themselves repeating the words and immediately compare themselves to the speaker, and write words from dictation. Note that in this segment, students are not learning the meaning of any words, instead

they are asked only to attend to spoken and written sounds. Students learn increasingly complicated sounds or rules about sound. All of the activities are designed to sharpen the students' ability to accurately discriminate, produce, and transcribe Arikara sounds (figure 5).

Vocabulary. Students are introduced to vocabulary by learning words for everyday items and situations from Arikara culture so that they may immediately practice speaking in class and at home. These words include greetings, kinship terms, food items, common objects, weather, and expressions for time. While learning Arikara vocabulary, students' understanding of English parts of speech is also reviewed and enhanced. For example, to explain how to use the word *owaátkAt* (outside), a brief and simple explanation of locative adverbs is given. Similarly, students learn how Arikara words differ conceptually from English words, e.g., *nawanú* (a verb for being, also going or walking around), thereby gaining an insight into Arikara culture only afforded through language study. In the Vocabulary segment, students listen to words spoken by native speakers, learn the meanings of the words, record themselves repeating the words, and translate the words in both directions (from Arikara into English and later from English to Arikara). Students are also asked to sort vocabulary words into semantic categories (e.g., words for foods, kin, greetings) or to classify words into grammatical categories (such as granular, liquid, or solid) and to indicate all of the possible translations of the word—for example, the word *ápos* can mean "an apple," "the apple," or "the apples."

Conversation. The grammar of Arikara is not only distinct from English, but it is also complex. Thus, the strategy here is to introduce a few concepts at a time, i.e., by teaching several simple structures first and repeating these structures but adding variety by inserting new vocabulary. In the Conversation segment, students first listen to brief, two-sentence conversations spoken by native speakers. The students then record themselves as they repeat the conversation they just heard. The purpose of this exercise is to first model the sentence structure and intonation and then give the students practice in speaking complete sentences (figure 6). Next, students are asked to remember the meaning of the conversations and translate phrases modeled in the conversations into English and Arikara.

Grammar. The Grammar segment explicitly describes how words function in model sentences in the Conversation segment. However, the explanation is in nontechnical terms and is illustrated with examples in Arikara and English as necessary. This way, although the student may not fully appreciate the grammatical explanations, he or she may internalize the rule through repeated exposure to examples (figure 7). Then, the student engages in exercises practicing these rules with the content he or she has already learned.

Sentence Patterns. Now that students have learned the sounds, words, and grammar and had sentences modeled for them, they can test what they have learned by completing the Sentence Patterns exercises. Whereas the other segments promote some rote practice, this segment challenges students to abstract and apply what they have learned. Here, the students translate novel sentences

Figure 5. Sample Written and Spoken Sounds Screen

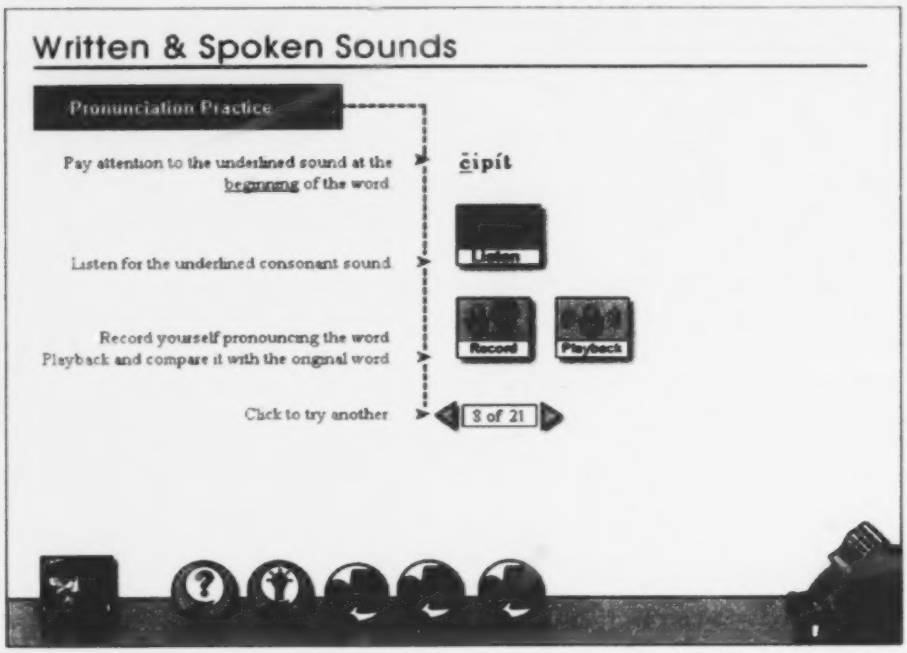
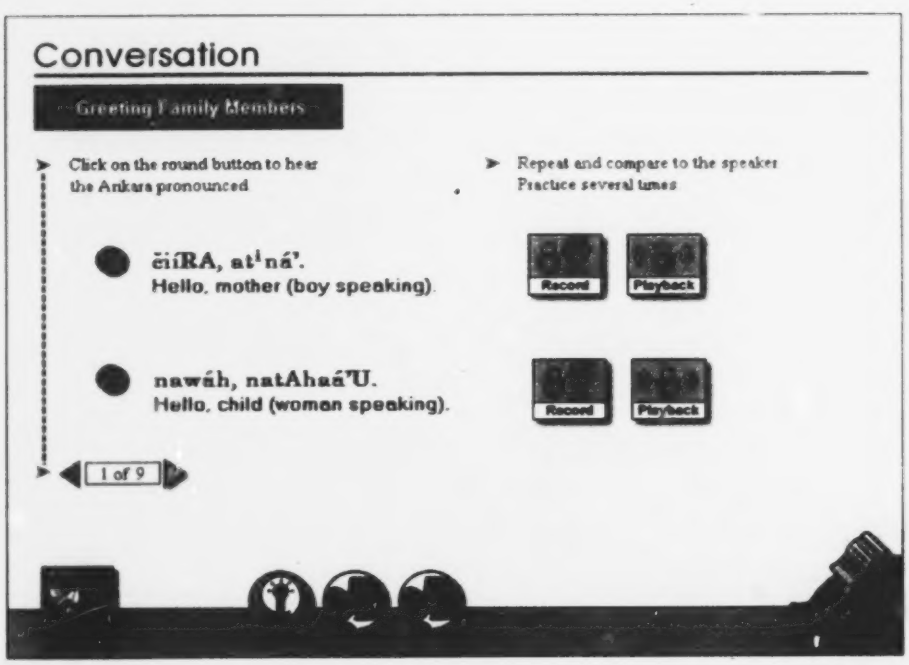

Written & Spoken Sounds
Pronunciation Practice
Pay attention to the underlined sound at the beginning of the word
čipít
Listen for the underlined consonant sound
Listen
Record yourself pronouncing the word
Playback and compare it with the original word
Record
Playback
Click to try another
8 of 21

Figure 6. Sample Conversation Screen



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not seen before, yet still employ the same structures and vocabulary taught in the current and previous lessons.

Culture. The Culture segment presents the students with vignettes about Arikara history and life, both before and after contact with Europeans, with narratives and oral traditions, stories from elders, descriptions of the organization of Arikara society, and so on. The vignettes are illustrated with archival and recent photographs, drawings, and video recordings, and incorporate recordings of Arikara music, words, and phrases (figure 8).

Computer interface

The design of the computer interface was informed by research in psychology and human-computer interaction to be both "user friendly" and pedagogically sound. "User friendly" simply means that use of the system is intuitive, that is, the student can easily figure out how to navigate through the system and engage in the exercises without difficulty. Although *using* the system is intuitive, *designing* such a system is not always such a straightforward task. Thus, the design team relied on previous research as well as our own empirical tests.

The steps involved in a typical design scenario are beyond the scope of this chapter. However, some of the more important steps are briefly described here. First, we had to specify what we wanted to teach (i.e., the linguistic components of Arikara: the sound system, vocabulary, and grammar), what skills we wanted the students to master (some speaking, listening, reading, and writing), and which cultural aspects to include to promote greater understanding of traditional Arikara society (e.g., kinship structure, oral traditions, and daily life).

These pedagogical goals dictated the system requirements needed. For teaching the sound system as well as speaking and listening skills, it was crucial that the lessons include sound recordings and as a self-record function to record and playback the voice of each student. The system also had to be able to check students' answers and provide corrective feedback. Furthermore, it had to support heavy graphics usage in the Culture segment of each lesson.

Previous research on computer-assisted instruction guided the design and implementation of these interactive features. For example, all interactions emphasize their functionality—all buttons look three-dimensional or "clickable." Consistent color mappings are employed so that blue Arikara text always means the text is "playable," red text always means it is "dragable." If an exercise involves more than one step (e.g., *listen*, *repeat*, *translate*), each step cascades down the screen only as the previous one is completed, focusing students' attention on each sub-task and promoting learning by reducing working memory load (Tarmizi & Sweller, 1988).

Moreover, good practice dictates that the system be tested by those for whom it is designed. In the early stages of development, the lessons were tested on-site at the White Shield School by 7th through 12th grade students. This proved a crucial step in the design process. We found that some of the exercises were not as intuitive as hoped, so they were redesigned and example pages were added. Many students breezed through the vocabulary exercises, but then found they

Figure 7. Sample Grammar Screen

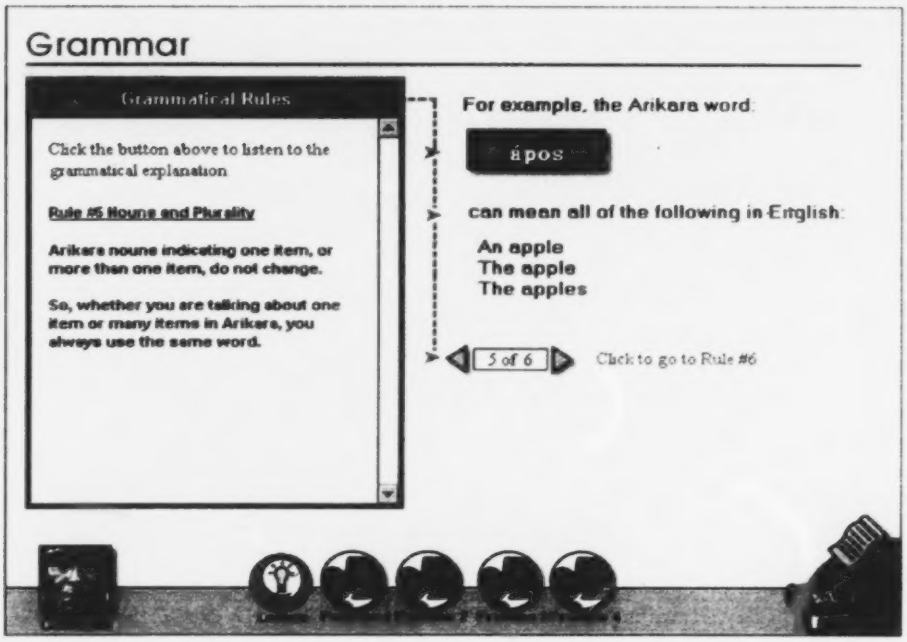
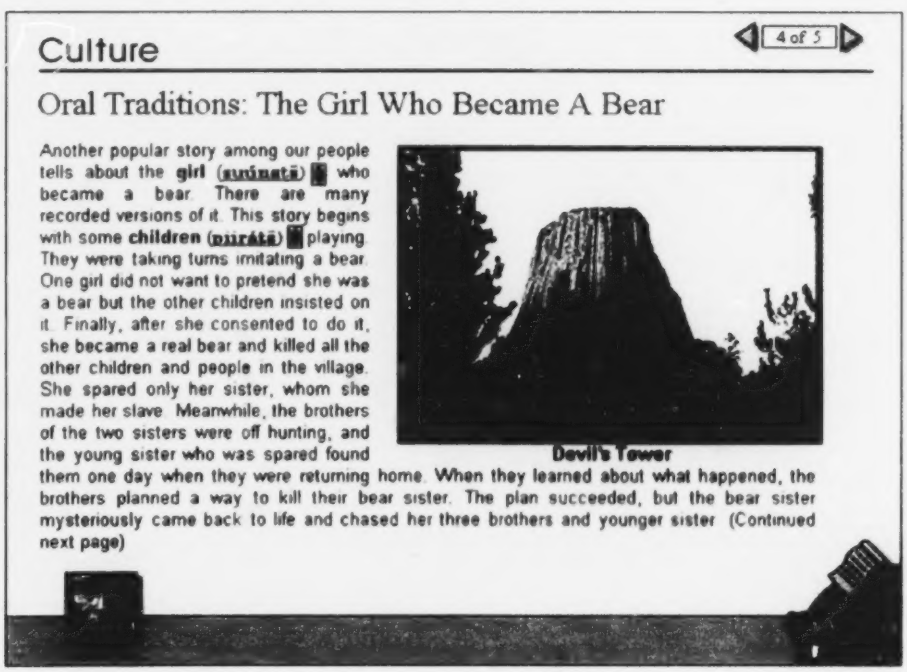

Grammar
Grammatical Rules
Click the button above to listen to the grammatical explanation
Rule #5 Nouns and Plurality
Arikara nouns indicating one item, or more than one item, do not change.
So, whether you are talking about one item or many items in Arikara, you always use the same word.
For example, the Arikara word:
ápos
can mean all of the following in English:
An apple
The apple
The apples
5 of 6
Click to go to Rule #6

Figure Figure 8. Sample Culture Screen


Culture
4 of 5
Oral Traditions: The Girl Who Became A Bear
Another popular story among our people tells about the girl (suúnatā) who became a bear. There are many recorded versions of it. This story begins with some children (púrátā) playing. They were taking turns imitating a bear. One girl did not want to pretend she was a bear but the other children insisted on it. Finally, after she consented to do it, she became a real bear and killed all the other children and people in the village. She spared only her sister, whom she made her slave. Meanwhile, the brothers of the two sisters were off hunting, and the young sister who was spared found them one day when they were returning home. When they learned about what happened, the brothers planned a way to kill their bear sister. The plan succeeded, but the bear sister mysteriously came back to life and chased her three brothers and younger sister. (Continued next page)
Devil's Tower

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had not paid close enough attention to spelling or meaning, so transcription exercises were included in the learning phase to prepare them for the recall phase. Students also collaborated in the design process directly by discussing and filling out questionnaires about the kinds of layout, exercises, and content they would like to see included. We responded to their requests by including more opportunities to listen to recordings of elders, to see more illustrations, to learn more about their own history, to be able to navigate backwards to review, and to use the keyboard more often, instead of relying solely on the mouse.

No program can be successful unless the user is taken into account in its design. Both the Arikara students' needs and preferences were included in the Arikara Language Lessons as much as possible.

Advantages of Computer-Assisted Instruction (CAI)

The computerized lessons are not a mere replication of the printed texts. Instead, they complement them by exploiting features that only computers can provide—above and beyond textbooks. For example:

Sound recordings: The most salient feature of computers that textbooks lack is the option of including sound recordings. Sound recordings preserve the language along with the voices of tribal elders and demonstrate correct pronunciation, intonation, and conversational style. Furthermore, computers can include a record and playback function that allows students to record and compare themselves to the Arikara speaker. Computers can also include music and video.

Feedback: Computers can provide immediate feedback about the correctness of a response, which improves the likelihood of learning (Anderson, Corbett, Koedinger, & Pelletier, 1995). Another advantage is that computer feedback increases student comfort-level, whereas teacher or peer correction can often make students feel overly self-conscious and inhibit learning. Students are more likely to learn without the fear of embarrassment (Schofield, 1995).

Repetition: Like learning to play an instrument, learning a language requires sustained practice. It is estimated that it takes an average of 60 exposures to a word to learn it and four to seven years to become truly fluent in a language (Collier, 1989). Repetition does not have to be the torturous drill that many remember in foreign language classes. In the Arikara Multimedia Language Lessons, exercises are designed to repeat concepts throughout a variety of activities, which increases learning and deepens understanding. Also, the system is patient—the student can hear and repeat a sound, word, or sentence indefinitely until it is mastered, something impossible to do in a classroom setting.

Access and Use of Time: One of the most robust findings regarding the effective use of computers in the classroom is that because students can work alone or in groups at the computer, the teacher's time is freed for individualized instruction. This is especially advantageous for students who need the most help. Both teachers and students benefit, and students' grades show marked improvement (Anderson, et al., 1995). Time-on-task is one of the greatest predictors of academic success. By inexpensively distributing the lessons on CDs to individuals, libraries, community centers, and tribal colleges, students and the whole

community can study outside of class, increasing their time spent learning, and students can learn at their own pace.

Preservation: The purpose of the lessons is to preserve the language by promoting its use. By using sound recordings, the language and the voices of elders are preserved forever, and the lessons are easily available to elders, parents, tribal colleges, community centers, and anyone interested in keeping the language alive.

Conclusion

Although immersion may be the ideal method for language preservation, it is not a viable alternative for many indigenous languages such as Arikara because of the lack of native speakers and environments where the native language is spoken. Computerized language lessons are a creative, workable alternative to immersion with great potential for both preservation and teaching. The Arikara Multimedia Language Lessons are programmed in modules and can be modified by teachers and students according to their needs, such as making the lessons age-appropriate for young students. "Plug-ins" can be added as desired. For example, the lessons currently link to an on-line dictionary; other possibilities include links to an on-line textbook or related web-sites. More volumes of lessons can be attached as completed, and the model can be extended to other languages. The computerized lessons are creative, interactive, and purposeful, and students who have worked with the lessons find them highly engaging.

The significance of using multimedia in language teaching could be prodigious. First, computerized lessons and dictionaries create a permanent record of the voices of tribal elders—native speakers of the languages—for future generations of Native Americans and others interested in Native American languages and cultures. Multimedia lessons also preserve the discourse patterns, songs, and ceremonial uses, so that they may be maintained. Second, only written and well-documented languages—such as Hebrew and Cornish—have been resurrected from near extinction. The meticulous documentation of the structure of all indigenous languages is likewise crucial to their preservation. Third, many North American tribes now lack speakers who can teach in the classrooms. If they do not currently face the same challenge as the Arikara, they are likely to do so in the near future. "Of the 175 surviving indigenous language in the United States, 155 or nearly 90 percent have no child speakers" (Krauss, cited in McCarty & Dick, 1996). The computer facilitates the preservation of the structure and sounds of the language and allows the dissemination of cost-effective lessons that are available to all members of the community—in venues such as classrooms, community centers, and homes. Students can study the language even without a teacher. Hopefully, other Native American tribes working to preserve their languages will be able to learn from the Arikara experience.

References

Anderson, J. R., Corbett, A. T., Koedinger, K., & Pelletier, R. (1995). Cognitive tutors: Lessons learned. *The Journal of Learning Sciences, 4,* 167-207.

Asher, J. (1996). *Learning another language through actions* (5th Ed.). Los Gatos, CA: Sky Oaks.

Brooks, J. (1998, April 9). Indians striving to save their languages. *New York Times*, A1.

Collier, V. (1989). How long? A synthesis of research on academic achievement in a second language. *TESOL Quarterly, 23,* 509-531.

Cumming, A., Burnaby, B., Hart, D., Daigle, J., & Corson, D. (1995). Learning outcomes in Ojibwe language courses at grades 3, 6, and 9. Report to the Ontario Ministry of Education and Training.

Doyle, R. (1998, March). Languages disappearing and dead. *Scientific American, 278*(3), 26.

Ellis, R. (1995). Interpretation-based grammar teaching. *System, 21,* 69-78.

Fishman, J. (1991). *Reversing language shift: Theoretical and empirical foundations of assistance to threatened languages.* Clevedon, UK: Multilingual Matters.

Ganschow, L., Sparks, R., & Schneider, E. (1995). Learning a foreign language: Challenges for students with language learning difficulties. *International Journal of the British Dyslexia Association, 1,* 75-95.

Greymorning, S. (1997). Going beyond words: The Arapaho Immersion Program. In J. Reyhner (Ed.), *Teaching indigenous languages.* Flagstaff, AZ: Northern Arizona University.

Hatch, E. (1974). Second language learning—universals? *Working Papers on Bilingualism, 3,* 1-17.

Koedinger, K. R., & Anderson, J. R. (1993). Effective use of intelligent software in high school math classrooms. In proceedings of the 1993 Conference on Artificial Intelligence in Education. Charlottesville, VA: AACE.

Krashen, S. (1981). *Second language acquisition and second language learning.* Oxford, UK: Oxford University.

Krashen, S., & Terrell, T. (1983). *The Natural Approach: Language acquisition in the classroom.* New York: Pergamon.

Larsen-Freeman, D. (1997). Grammar and its teaching: Challenging the myths. ERIC Digest. ERIC Clearinghouse for Languages and Linguistics, Washington, DC.

Leap, W. (1993). *American Indian English.* Salt Lake City: University of Utah.

Littlebear, R. (1997). Long term effects of language loss. Presentation at the North Dakota Bilingual Bicultural Education Conference. Mandan, ND.

McCarty, T., & Dick, G.S. (1996). Proceedings from the 1996 World Conference on Literacy.

Paulston, C.B. (1992). *Linguistic and communicative competence: Topics in ESL.* Clevedon, UK: Multilingual Matters.

Pienemann, M. (1984). Psychological constraints in the teachability of languages. *Studies in Second Language Acquisition, 6,* 186-214.

Schneider, E. (1996). Teaching foreign languages to at-risk learners. ERIC Digest, ERIC Clearinghouse on Languages and Linguistics, Washington, DC.

Schofield, J. (1995). *Computers and classroom culture.* Cambridge, UK. Cambridge University.

Smith, A.B. (1987). Recent developments in early childhood "educare" in New Zealand. *International Journal of Early Childhood, 19,* 33-43.

Tarmizi, R.A., & Sweller, J. (1988). Guidance during mathematical problem solving. *Journal of Educational Psychology, 80,* 424-36.

VanPatten, B., & Cadierno, T. (1993). Input processing and second language acquisition: A role for instruction. *Modern Language Journal, 77,* 45-57.

The Place of Writing in Preserving an Oral Language

Ruth Bennett, Pam Mattz, Silish Jackson, Harold Campbell

This paper shows how a traditional story can be used to teach an indigenous language and how the inclusion of writing can help students learn the language effectively. The Language Proficiency Method used by the Hoopa Valley Tribe's language programs is described along with supporting research and sample Hupa language activities built around the story "Coyote Steals Daylight." The activities demonstrate a sequencing principle basic to the method. They begin with questions and answers and progress to conversations, games, storytelling, and dramatic performances.

This is the beginning of Xontehłtaw Yiłxay K'itehłkyo:t, Coyote Steals Daylight:

This is a story about what Coyote did.
Coyote was walking along.

And then, he saw some people digging Indian potatoes.
But it was still dark yet, there wasn't any daylight.
When the people saw Coyote, they said,
"Come on up to the house."

Hupa teachers tell many Hupa stories to teach the Hupa language. The story Xontehłtaw Yiłxay K'itehłkyo:t (see Appendix A) tells the adventures of Coyote, a primary actor in a world populated by animals and other characters. The story begins with setting the scene, capturing the listener's attention, and preparing for what is ahead. As the story continues, Coyote meets two boys who are alone in a house. When he discovers they are guarding a bag of daylight, he cannot resist sending the boys to fetch water. Then he grabs the bag of daylight and runs away with it. Eventually, the bag breaks and daylight comes to the world.

This story demonstrates the moral complexity of native California stories. One way to look at what Coyote does is that he brought something good to all the people. There is another side to this, however. Coyote takes daylight away from a house where it has been left with two children. He tricks two boys into getting some water for him, so he can escape with the bag of daylight. So, although Coyote's actions are good in one sense, in another sense they are ruthless. Coyote's actions in this story show his individualistic side. Acting alone, he runs with the bag of light, and, even though he is caught, he brings daylight to the world.

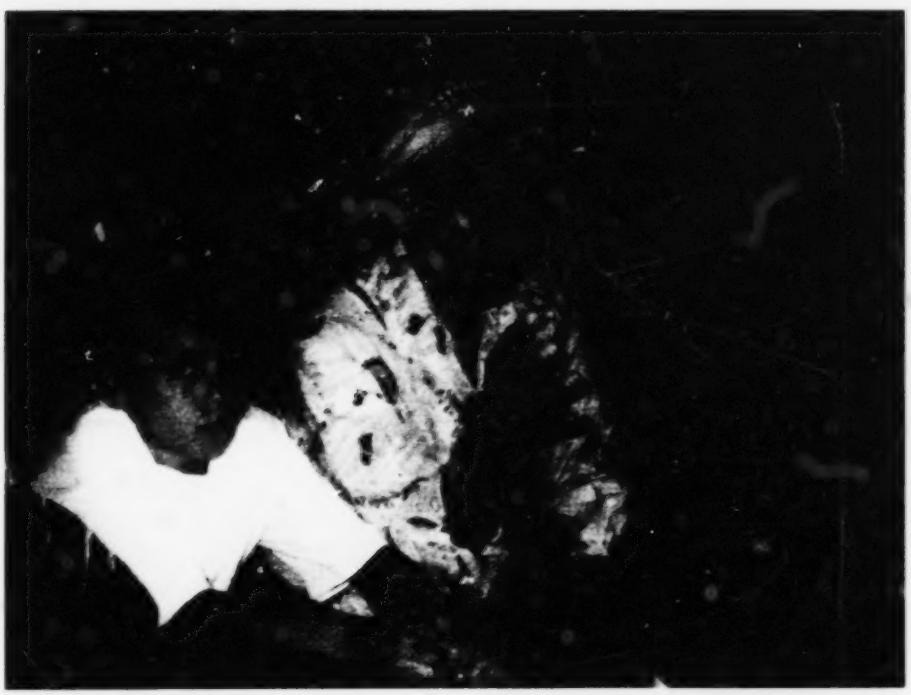
Hupa people have told Coyote stories for thousands of years. The characters' actions are sometimes humorous, sometimes serious. They record how the world that Indians know came to exist. Continuing to tell the old stories in the Hupa language preserves the native language for Hupa people and preserves their oral history.

Creating Hupa story lessons provides a way to use stories in teaching (Wilkinson, 1998). Teaching stories effectively requires a method of presentation. In the Language Proficiency Method described in this paper, the focus is on a sequence whereby students can progress from easier to more difficult material. Language Proficiency units begin with lessons built around questions and answers and expand to conversations, games, storytelling, and dramatic performances. The writing activities described in Appendix B of this paper illustrate the Language Proficiency Method, which is used in the Hupa Language, Culture, and Education Program of the Hoopa Valley Tribe in a variety of classes, ranging from preschool through high school.

The writing component in language lessons

An important consideration in any language teaching method is to maximize opportunities for learning. In Hupa language classes, time is of the essence because Hupa, like many other indigenous languages, has few people left who

Figure 1. Bishop Rivas and James Jackson, Hupa Language, Culture, and Education Program



speak it every day. In this situation, the native language is a second language for the students. Because the Hupa Language, Culture, and Education Program is a second language program, it is important to consider carefully various approaches for teaching second languages. One question that arises in second language teaching is whether to concentrate on speaking, or to also include writing.

Critics of writing instruction maintain that students who spend too much time writing never learn to speak. These critics maintain that indigenous languages are complex and that learning a writing system only makes things more difficult. Writing instruction takes up time that is better spent speaking. Another argument in favor of teaching spoken language as opposed to written language is that Hupa and other California languages have become written languages only in this century. Their writing systems have been developed by scholars and so are not needed by native people (see also Bielenberg, this volume).

However, the complexity of the language can also be the basis of arguing for the use of writing in language lessons. Although historically the Hupa language was oral, its complexity includes a grammar where verb stems can change form from singular to plural. Its system of meaning is complex as well, with many words based upon metaphors that require interpretation of images. Writing down the forms of a complex language can be a way of dealing with these complexities so they can be better understood by students. Students need to return again and again to a form, and writing provides a ready reference. A second argument in favor of writing is that Native people have adopted writing systems for their languages in recent years (Hinton, 1994). In northwest California, the Hoopa Valley Tribe, the Karuk Tribe of California, the Wiyot Tribe, the Yurok Tribe and the Tolowa each have writing systems.

The Language Proficiency Method

Before explaining the Language Proficiency Method, we need to explain that there are a variety of names and other variations in this method, but the general principles have been advocated by various California programs, including the California Foreign Language Project—Redwood Area at Humboldt State University, the Native California Network (a privately funded Native American organization), a Karuk Language Conference Center in Orleans, and the Johnson-O'Malley Program of the Hoopa Valley Tribe.

The Language Proficiency Method is based upon the belief that writing is useful within a program of language instruction. Writing offers a sequence for presenting new language material, moving from easier to harder forms, and can also be the basis for communication. When writing is included in the program, the teacher can move from speaking to reading and writing, reinforcing concepts with writing.

The sequence in the method begins with attention-getting lesson presentations by the teacher. From level 2 through level 5, each level builds on the earlier one. A new level is introduced when students approach mastery at a given level. Teachers often ask at what level in the sequence to introduce writing. This choice

is left to the teacher, although it is possible to introduce writing at beginning levels. The levels are as follows:

1. Setting the Scene: capturing attention
2. Comprehensible Input: "filling the bucket"
3. Guided Practice: "fill in the blank"
4. Independent Practice: generating language
5. Challenge: performing
6. Expansion: applying other areas of instruction

At the first level, the student listens. At the second level, the student demonstrates understanding non-verbally. At the third level, the student responds with one or two word responses. The student formulates complete sentences in level 4. By level 5, students generate their own conversations (Bennett, 1997). The levels build from where the teacher talks to the students to where the students talk to each other.

Each level consists of lessons that include culturally relevant activities. These range from a Hupa story told by the teacher to questions and answers about Hupa life, to games that involve play with cultural concepts, to student performances of Hupa plays (See Appendix B for sample activities for each level).

Figure 2. Sarah Jarnaghan with Mina:xwe Raccoon Puppet

Issues relating to writing

How writing is defined affects some issues related to written language instruction. These issues relate to the following:

- the idea of writing as a learning tool
- learning to speak and learning to write
- the issue of transference of thought processes into the second language
- the relationship between learning styles and learning strategies
- strategies proven effective with Native American students

Writing as a tool in learning: One issue involves a correspondence between learning to speak and learning to write. Writing in language programs has been criticized on the basis that students who learn to write well learn grammar rules and their spoken language suffers. It is important in native language programs that writing be a tool for improving speaking skills, not for replacing them.

When presented as an option, writing can be a valuable tool both in enhancing group activities and in developing self-study skills. Teachers can convey the idea of writing as a tool by the type of activities they include in their lessons. They can ask students to write down what they hear, they can assign them to transcribe from tapes, and they can ask them to develop questions based upon readings.

Learning to speak vs. learning to write: A second issue involving written language relates to what language is spoken in contrast to what is written. In one view, spoken language is broader than written language. In this view, spoken language is any utterance, but written language refers to forms of discourse. In this definition, the idea of written language places it on a different level from spoken language. This is based upon the fact that written language requires prior knowledge of a spelling system, grammar rules, and sentence patterns. Written language becomes associated with more advanced learning, and therefore with larger pieces of language, such as fiction, nonfiction, and other forms of discourse. This view of the difference between oral and written language makes the assumption that written language is "a higher level of language" (Cohen, 1997).

This view of writing, however, can be counterproductive. When students feel that they have to adhere to a higher standard than they are capable of, they may give up altogether. The belief that written language can be anything that is spoken creates a liberated view of writing. In this view, written language encompasses all utterances, including colloquial expressions, one-word utterances, and even gasps and sighs; all of these spoken utterances can be written down.

In this view, writing <u>is</u> speech written down. This view de-emphasizes the notion of correctness associated with written language in the other view. It is intended to encourage students to write, being aware of correctness but not repressed by it. It is important that writing be a tool to help the student. Writing connects to what is heard and spoken. The letters of an alphabet are a visual accompaniment to vowel and consonant sounds. A writing system is a way of

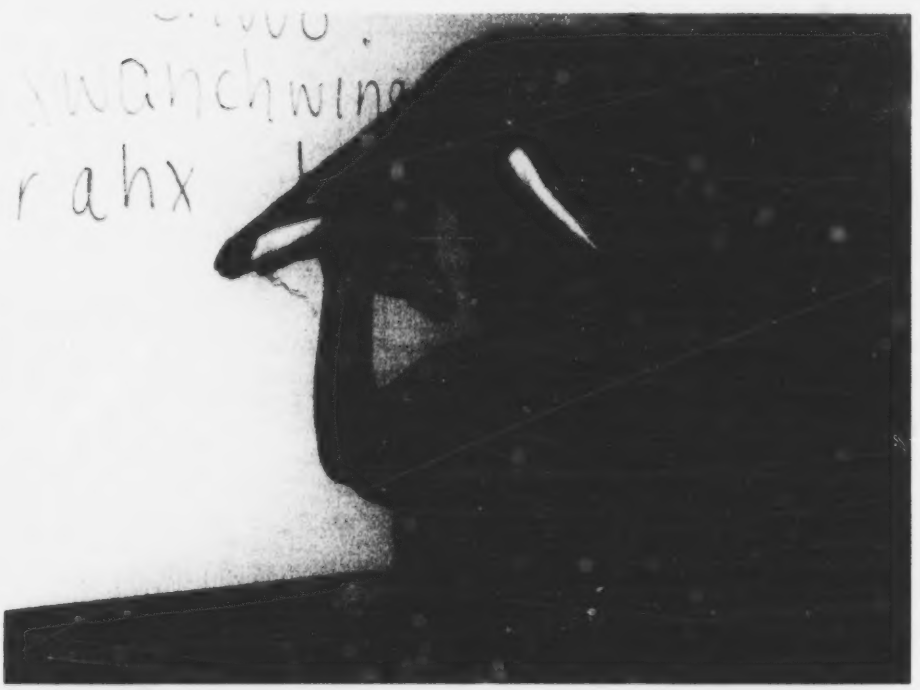
making a spoken language tangible because it exists in a form where it can be collected, stored, and recalled.

Learning response patterns: A third issue involving writing is related to second language learning and the nature of interpretation and translation processes. Ways of interpreting are based on prior experiences and upon shared knowledge with others who speak the language. When students begin learning a second language, they rely on ways of interpreting that have been acquired through their first language. They continue to use their first language in their interpretations until they develop sufficient patterns of response in a second language. It is generally known that learning how to write in a second language is a common obstacle encountered by language students.

A reason for introducing writing early in the learning process is that when students become accustomed to writing in the second language, it is no longer an obstacle to be feared later on. In addition, early introduction of writing provides an opportunity for writing skills to develop simultaneously with new thought processes in the second language.

Research on learning styles and learning strategies: Various research studies have shown that instruction that combines writing with spoken language reaches a broader group of students. This is owing to differences in learning styles and learning strategies. Research on second language acquisition

Figure 3. Hupa Language, Culture, and Education Summer Program Student Portraying a California Condor



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substantiates this view, showing that if a classroom inhibits students' opportunities to demonstrate their knowledge, learning will be affected (Johnson, 1995).

A rationale for teaching writing is that some students are visual learners, rather than auditory. These students have difficulty grasping meanings from sounds. When writing is introduced to these students at the one-or-two word response level, these students especially benefit. Conversely, when writing is held off until these students are at the stage of communicating forms of discourse, they are slowed down more than other students as they translate, interpret, and remember more effectively with the assistance of writing.

The Language Proficiency Method adapts readily to instruction in written language. Activities that incorporate writing proceed as follows (see Appendix B for sample writing activities for each level):

1. Setting the Scene: Teacher shows flashcards with pictures named in the native language
2. Comprehensible Input: Teacher writes vocabulary on the board
3. Guided Practice: Teacher asks student to write down answers in the native language in their notebooks
4. Independent Practice: Students generate questions to ask elders in the native language
5. Challenge: Performing plays in the native language
6. Expansion: Writing history and geography lessons in the native language

Strategies proven effective with Native American students: Research has shown that Native American students benefit from a variety of learning strategies—including social, cognitive, memory, and compensatory ones—and that learning styles influence learning strategy (Okada, Oxford, & Abo, 1996). Writing is particularly useful to students who have visual learning styles. Research on Native American students has dealt with various aspects of learning styles and learning strategies.

A well-known study of Native American students' classroom learning was carried out by Susan Philips (1972) on the Warm Springs Indian Reservation. Philips compared differences between the social conditions governing verbal participation in middle-class Anglo-American classrooms and in the Warm Springs community. She found that the Warm Springs students' willingness to participate was related to the ways in which verbal interaction was organized and controlled.

Philips' observations of Warm Springs students revealed that Warm Springs students were more willing to participate verbally when they could self-select when to speak. This was consistent with conditions within the Warm Springs community where learning tasks generally follow a sequence of extensive listening and watching, then supervised participation with tasks segmented by an elder, and then private-self-initiated self-testing of what is learned. The use of speech in such activities is minimal, and competence is demonstrated through

the completion of the task itself. Philips argues that to accommodate children of different cultural backgrounds such as the Native American culture, "efforts be made to allow for a complementary diversity in the modes of communication through which learning and measurements of 'success' take place" (Philips, 1972, p. 393).

In a 1998 article Heredia and Francis (1997) examine the instructional uses of traditional stories in realizing the educational potential of Native American children. They report that stories were the books for all Native American peoples. They state that it is important to understand that some tribes had writing systems before Europeans introduced alphabetic writing in the sixteenth century. Tribes already had various pictographic, iconic, and mnemonic systems related to their interest in storytelling as well as to the preservation of their languages over thousands of years. Because of the broad popularity of stories since intercultural contact, Heredia and Francis view stories as a potential for enriching the reading and language arts curriculum, with direct applicability to "developing students' writing skills" (1997, p. 53).

In a study of the influence of stories on oral and written language development, Aronson shows that children who listen to stories learn that stories are a method of communication. "From stories children acquire expectations about the world. They learn about language and people and places" (1991, p. 12). The use of story conventions as an indication of language learning was found in children's written stories. Their language learning included knowledge of narrative conventions, such as formal beginnings, formal endings, and consistent uses of past tense. Research has shown that stories provide a narrative model for students' writing and are vital to their early language development. The use of story conventions were reported as early as age two when children are at a one-or-two word stage of oral language development. Aronson (1991) reported that children were writing stories by age five.

In a study of Native American children on the Hoopa Valley Indian Reservation in California, Bennett (1980) demonstrated a progression in language development in children age 2 through 12. Proto-narratives appeared at the two-word stage, expanding in complexity as the children grew older. In documenting the role of stories in passing on the Native American heritage, Bennett demonstrated that the older children told traditional stories. These stories were composed with metaphorical interpretations and multi-sentence organization. Students benefited in classroom instruction from writing down stories they had heard.

Earlier studies that demonstrate the importance of writing for Native American students document their visual learning styles. In a comparative study of Navajo children and Dutch whites in Michigan by Steggerda and Macomber (1934), Navajo children were found to perceive visual objects according to the usefulness in their visual context. The Navajo children rejected the horse that was old and thin, the landscape that had no water or shade, and the house with no room to walk around. The Dutch whites, in contrast, were aware of the objects as pictures, and noted form, arrangement, and colors. The conclusion is

that the Navajo children read the stories told in the pictures to understand visual cues. The implications are both that the Navajo children are visual learners and that they use cultural forms of language, such as stories, to interpret visual cues.

In a classic study comparing Native American children with Euro-American children, Wayne Dennis (1942) tested visual perceptions in a Draw-A-Man test. The drawings of Hopi children in the older age group (age 10 as compared with age 6) showed more cultural traits, with the drawings showing Hopi hairstyles and dress, including ceremonial dancers. Hopi children reflect their cultural experiences in their drawings. The conclusion is that writing (in the form of drawing) is an important part of the language development that appears in the youngest children in the study and shows an increase in socio-differentiation with age. This study documents the cultural basis for visual learning.

The success of writing activities introduced in Native American language classrooms depends upon students finding themselves in instructional situations that they recognize. Johnson (1995) showed that it is crucial for the teacher to become established as a socially relevant figure whose approval is valued by the students. How the teacher accomplishes this task includes the use of visual aides. Flashcards, puppets, and other aids play a role in having students perceive the teacher as someone who reaches out to them. Tasks need to be designed so that students can succeed and teachers have the opportunity to give approval to correct student responses. Thus, it is important not to introduce writing at too early

Figure 4. Icha Little, Charlotte Saxon, Silish Jackson (back), Keweah Rivas (front), Angela Saxon, Laura Del Santos, and Danny Ammon Performing Xa:xowilwa:tɬ' Puppet Play

an age or to let writing substitute for speaking. The sequencing of units as well as the amount of material students can assimilate are other important issues (Geerbault, 1997). Below is a checklist for writing activities and a list of advantages and disadvantages:

- students practice writing the letters that represent each of the sounds
- students write down words they hear
- students write down questions for elders and record their answers
- students write their lines in a story performance or puppet play

Possible advantages of writing systems for native languages

- having a record with which to check one's memory
- opportunity for private self-study
- being able to analyze language and construct original sentences
- developing organizational skills in written language
- transfer of knowledge to and from spoken language

Possible disadvantages of writing systems for native languages

- need for practicing oral memory
- need for practicing conversation
- needing a living person as a partner
- changing language from what it has been for thousands of years

Conclusion: Meeting the needs of the Hupa community

At the time the Hupa Language, Culture, and Education Program began in 1963, there were monolingual Hupa speakers. These people were so immersed in the Hupa language and culture that they lived entirely on the 12 square miles of the Hoopa Indian Reservation. At this time, the Hupa oral tradition was a part of the daily life of people living on the reservation. It was possible to visit an elder's home and hear a story handed down from the ancestors, much as it had been for thousands of years previously.

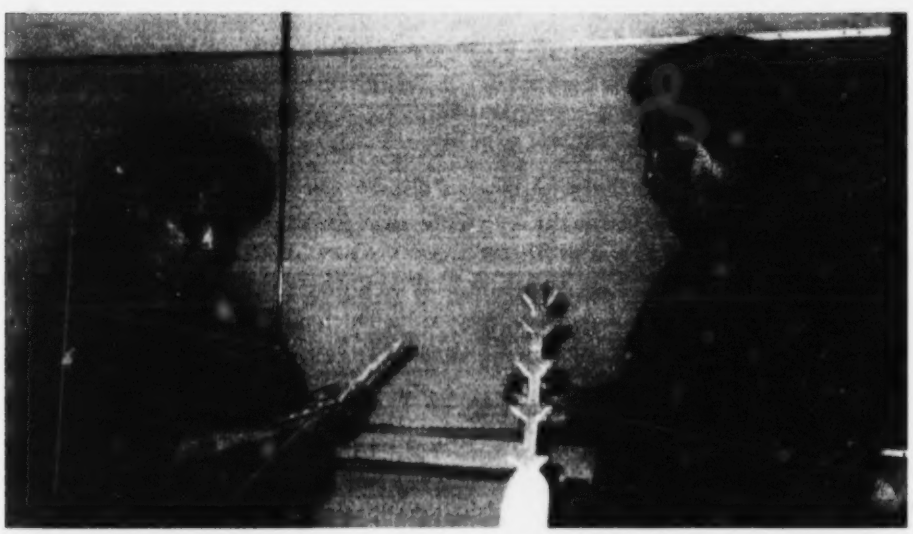
Today, Hupa language elders are bilingual. Some have traveled to other countries, and many have communicated with people from other continents. Today's Hupa language students live in a global community as well. They participate in electronic networking that includes e-mail, the internet, interactive videos and CD's, and extends worldwide.

Rather than decrease the value of the Hupa language, however, the worldwide basis for communication has increased it. For the Hupa language students, study of the Hupa language enlarges their range of communication. There is interest in the Hupa language by many from outside the community. Bilingual skills enable Hupa speakers to share their language as a way of participating in international discussions.

Note: *Photos*: by Ruth Bennett; *Graphics*: Photo-scans by Kelly Getz, CICD Graphics Dept.

Figure 5. Community Hupa Language Class: Front Row: Tasha Norton, Minnie McWilliams, Jill Sherman, Cody Fletcher, Nina Kebric, Lila Kebric, Natalie Carpenter, James Jackson, Calvin Carpenter. Back Row: Myra Kebric, Gina Campbell, Danielle Vigil, Wendy George, Jacqueline Martins, Gordon Bussell, Melody Carpenter, Joseph Rafael, Marcellene Norton, André Kebric, Visiting Professor from Moscow, Russia

Figure 6. Pam Mattz, Director, Hupa Language, Culture, and Education Program, and Gordon Bussell, Hupa Language, Culture, and Education Program Teacher, Examining Acorn Paddles Made by Johnson-O'Malley Program Students



References

Adley-SantaMaria, Bernadette. (1997). White Mountain Apache language: Issues in language shift, textbook development and Native speaker-university collaboration. In Jon Reyhner (Ed.), *Teaching indigenous languages* (pp. 129-143). Flagstaff, AZ: Northern Arizona University.

Aronson, Roxanne. (1991). *The impact of literature on oral and written language development.* Unpublished master's thesis. Sioux Falls College, SD.

Bennett, Ruth. (1980). *Hoopa children's storytelling*. Unpublished doctoral dissertation, University of California, Berkeley.

Bennett, Ruth. (1997). It really works: Cultural communication proficiency. In Jon Reyhner (Ed.), *Teaching indigenous languages*. (pp. 158-205). Flagstaff, AZ: Northern Arizona University.

Cohen, M.D. (1997). *California foreign language project: Redwood area.* Unpublished manuscript Humboldt State University, Arcata, CA.

Dennis, Wayne. (1942). The performance of Hopi children on the Goodenough Draw-A-Man Test." *Journal of Comparative Psychology, 34*(3), 341-348.

Gerbault, Jeannine. (1997). Pedagogical aspects of vernacular literacy. In. Andree Tabouret-Keller, et al. (Eds.), *Vernacular literacy: A re-evaluation*. Oxford, UK: Clarendon.

Gifford, E.W. (1930). *California Indian nights*. Lincoln: University of Nebraska.

Heredia, Armando, & Francis, Norbert. (1997). Coyote as reading teacher: Oral tradition in the classroom. In Jon Reyhner (Ed.), *Teaching indigenous languages* (pp. 46-55). Flagstaff, AZ: Northern Arizona University.

Hinton, Leanne. (1994). Writing systems. In L. Hinton, *Flutes of fire: Essays on California Indian languages* (pp. 211-219). Berkeley, CA: Heyday.

Johnson, Karen. (1995). *Understanding communication in second language classrooms*. Cambridge, UK: Cambridge University.

Okada, Mayumi; Oxford, Rebecca, & Abo, Suzuna. (1996). Not all alike: Motivation and learning strategies among students of Japanese and Spanish in an exploratory study. In Rebecca Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 105-120). Honolulu, HI: University of Hawaii at Manoa.

Philips, Linda M. (1989). *Using children's literature to foster written language development* (Tech. Rep. No. 446). Center for the Study of Reading, University of Illinois at Urbana-Champaign.

Philips, Susan. (1972). Participant structures and communicative competence: Warm Springs children in community and classroom. In Courtney Cazden, Vera John, & Dell Hymes (Eds.), *Function of language in the classroom* (pp. 378-387). New York: Teachers College.

Steggerda, Morris, & Eileen Macomber. (1934). A revision of the McAdory Art Test applied to American Indians, Dutch whites and college graduates. *Journal of Comparative Psychology, 26*, 349-353.

Wilkinson, Leona. Native California Network, oral communication, 5/5/98.

Appendix A
Coyote Steals Daylight
Free English Translation by Ruth Bennett

This is a story about what Coyote did.

Coyote was walking along.

And then he saw some people digging Indian potatoes. But it was still dark yet, there wasn't any daylight. When the people saw Coyote, they said, "Come on up to the house."

Coyote was surprised to see a building, a big long house. There weren't very many long houses around there, so he became curious. He decided to go up to the long house. And then when he got there, Coyote saw two little boys sitting in that house. And then Coyote went inside the house and looked around. He saw a lot of things hanging up there next to the roof.

And then he looked up at the bags and asked the two boys, "What is that?"

They told him that they didn't know. Then, when Coyote kept on asking them, one of them said, "Look, that bag there is only rain. That other one there is lightning."

Now Coyote was really curious. He noticed that one of the bags was bigger than the others. Coyote asked, "What is that big bag for?"

Coyote kept on asking about each one of the bags. Then, he saw a bag that was bigger than the others. He had to know what that one was, so he asked, "What's in that bag?" The boys kept silent, but finally one of the boys told him, "That one is daylight."

And then when Coyote found out that Daylight was in that bag, he thought, "I am going to steal that bag with Daylight in it."

He told those two boys, "Bring some water for me." When they went off, he thought, "I hope you will be gone a long time." He wanted them to stay away from the house. If only they would start playing, they might stay away longer, he thought.

That big bag was hanging up. Coyote knew he had to act quickly. And then he jumped up; he grabbed that bag. He jumped up and brought the bag down from the rafters.

He ran away fast with that big bag. And then he ran away fast with it all. And then those two boys came back. They went into the house. And then they looked inside. That big bag wasn't hanging there any more.

They looked; that big bag that used to be hanging there was gone. He stole that daylight. Yes he did.

And then the two boys ran off. They were chasing Coyote. "Come back here," one of them shouted to Coyote. "You stole Daylight from us." But Coyote didn't stop.

And then one of the boys said, "We'll have to bring in the fastest birds: Hummingbird, grouse, pigeon." That's some of the fastest ones, they had to bring in the fastest birds to catch Coyote. And the two boys kept on looking for Coyote. Then they came across a house. There was an old man sitting in front of the house. He was someone who looked like a rich man. He looked like he had been sitting there for a long time.

So they thought, "Maybe this is his house."

They asked him, ""Haven't you seen coyote? He stole daylight from us."

The old man said, "No."

Outside the house, there was a flat rock. Just then, the boys saw Coyote running around in back of the house. The boys knew that the old man had turned into Coyote. They ran to tell the birds, "We know where Coyote is." Those birds flew after him. And then they caught him. And then they picked him up. They told him, "Bring that bag of daylight back." As they were carrying him, he was still holding the bag. He brought it back out.

And then Coyote threw the bag down on a rock.

The bag of daylight fell down on the rock.

It broke the bag. Daylight went everywhere.

When he broke the bag, Daylight came to be.

He did it, he brought the daylight.

That's the end of it.

Appendix B
Writing Activities at Six Levels with Sample Hupa Language Activities Built Around the Story "Coyote Steals Daylight"

1. Setting the Scene

- teacher creates the context, relates the task to student interests
- use of visual aids: teacher shows slides of puppet shows with students putting on the performance

2. Comprehensible Input

- non-verbal response, repetition of teacher, yes-no response.
- teacher says names of characters and displays characters through puppets and flashcards. Two forms of media communicate meaning more effectively
- teacher writes name of character

Characters:		***Props:***	
Xołch'ixolik	Narrator	**Tehmil**	Sack
Xontehłtaw	Coyote		
Kehłtsa:n	Girls	**Yiłxay**	Daylight
Nahxe kilexich	Two boys	**Na'iya**	Rain
K'isdiya:n	Old man	**K'iqiwh**	Lightning
Xayont	Pigeon	**K'e:niwh**	Thunder
Q'o:so:s	Hummingbird	**Tesch'e**	Wind
Diwhkyoh	Grouse		

3. Guided Practice

- Teacher asks student to respond to either-or questions
  T: **Hayde xontehłtaw.** (This is coyote.) **Hayde xontehłtaw?** (Is this coyote?)
  S: **Hayde xontehłtaw**. (This is coyote.)
- Teacher writes the names of characters and asks students to write the name of characters

4. Independent Practice

- Student supplies vocabulary term
- Teacher introduces baseball game activity, holding up flashcards and puppets
- Students divide into two teams
- Students who identify name of characters proceed around the bases
- The team who stays in the game the longest, wins
  T: **Dundi hayde?** (Who is this?)
  S: **Hayde kilexich.** (This is a boy.)
- Students keep track of who is winning by writing the names of characters that are guessed correctly or incorrectly

5. Challenge

- Sentences with storyboarding
- Teacher has a board on which is a setting for the story. The student's task is to place characters on the board. The student is then to write out an appro-

priate sentence for the characters and place the sentence on the board along with the characters.

- Characters and sentences taken from the Coyote Steals Daylight story:

Xontehłtaw ch'iqal. Coyote is walking.
Da:ywho' xontah ne:s sa'an. There was a long house standing somewhere.
Kehłtsa:n xosing xa'k'iwhe inyehtaw. A bunch of girls are digging Indian potatoes.
Xontah ch'ing' xa:singya:wh. Come on up to the house.
Nahxe kilexich ya:ng'e:tł'. Two boys were sitting there.
Diydi hayde' hay tehmil? What is in that sack?
Na'iya tehmil-me'q hay-yo:w ła:yxw 'e:na:ng'? It is only Rain there in that sack.
Tehsch'e hay-yo:w ła:yxw 'e:na:ng'. It is Wind in that sack.
Hay-yo:w ła:yxw 'e:na:ng' k'iqiwh. Only Lightning is in there.
Hay-yo:w ła:yxw 'e:na:ng k'e:niwh. Only Thunder is in there.
Diydi hayde' hay tehmil nikya:w? What is in that big sack?
Haya:ch'ing' yiłxay. That one there is Daylight.
Hay yiłxay k'itehłkyo:te. I am going to steal Daylight.
Dahdiwhła:te. I am going to run off.
Yehxowinyo:l. Chase him.
Da:w. No.
K'isdiya:n xontehłtaw yehdo:xołtsis'ung? Old man, have you seen Coyote?
Yiłxay ch'e:we:l nohwung. (To the Old Man) He stole Daylight from us.
Mich'ing' yiłxay ne'en nohwung k'itehłkyo:t. (To Grouse, Hummingbird, and Pigeon) He stole Daylight from us.
Xołkit! Catch him!
Na:nda'awh! Bring it back!
Xa', ch'e:na:niwh'awh. All right, I'll bring it back.
Whe'axołkit. I caught him.
Hay tse: miq'it k'exołwuł. He threw the sack on that rock.
Hay tehmil ts'isgya:s. That sack broke.
Ahk'idyaw yisxa:n. Daylight happened.

- A puppet performance is presented by one group of students for the class. The teacher introduces younger students to writing by having them make puppets. Intermediate students write out names of characters, draw characters for story boards, and write narrative sentences. Advanced students write out scripts and put on puppet plays (see section 2 above for a list of characters and props). The script for the Coyote Steals Daylight Puppet Play is given on the next page (Adapted from a story in the Hupa language by Ed Marshall, by Herman Sherman & Fred Davis 6/23/83, and by James Jackson, Calvin Carpenter, William Carpenter, & Minnie McWilliams, 2/4/98).

Xontehłtaw Yiłxay K'itehłkyo:t (Coyote daylight he stole)

This is a story about what Coyote did:

Xołch'ixolik: **Xontehłtaw ch'iqal.** Coyote was walking along.

Xontehłtaw: **Kehłtsa:n xosing xa'k'iwhe inyehtaw.** A bunch of girls are digging Indian potatoes.

Kehłtsa:n: **Xontahch'ing' xa:sinya:wh.** Come on up to the house.

Xontehłtaw: **Xontah ne:s.** It's a long house. **Nahxe kilexich ya:ng'e:tł'.** Two boys are sitting there. **Hay-yo:w łe:lmin'din na:ng'e:tł'.** A lot of things hanging up there next to the roof there. **Diydi hayde'?** What is that?

Łą' kilexich: **Do:'owhts'it.** I don't know.

Nahx kilexich: **Na'iya tehmilme'q hay-yo:w ła:yxw 'e:na:ng'.** Look, inside that sack there is only Rain.

Xontehłtaw: **Diydi hayde'?** What is that?

Łą' kilexich: **Tehsch'e hay-yo:w ła:yxw 'e:na:ng'.** That other one there is only Wind.

Xontehłtaw: **Diydi hayde'?** What is that?

Nahxe kilexich: **K'e:niwh hay-yo:w ła:yxw 'e:na:ng'.** That other one there is only Thunder.

Xontehłtaw: **Diydi hayde'?** What is that?

Łą' kilexich: **K'iqiwh hay-yo:w ła:yxw 'e:na:ng'.** That other one there is only Lightning.

Xontehłtaw: **Hay tehmil nikya:w diydi hayde'?** What's in the big sack?

Nahx kilexich: **Hay łe:ya'una:ng' hay miłch'ing' yiłxay.** That one is Daylight.

Xontehłtaw: **Hay yiłxay k'ite:skyo:te.** I am going to steal that bag with Daylight in it. **Wha to:'onchwine!** Bring some water for me. **Isto' ch'a'asda' na:ya'usde:tł' sa'a min'day' na:wohnehł.** I hope they go off and play and stay gone a long time. **Hay tehmil nikya:w nahłsis.** That big sack is hanging up. **Xa' yawhtong' mixa ch'iłkit.** I'll jump up and grab it. **Dahdiwhła:te.** I will run away.

Nahxe kilexich: **Do:xole:ne hay tehmil nikya:w nahłsis-ne'en.** That big sack isn't hanging there any more.

Xołch'ixolik: **Haya:ł ch'idaxodiwing'a:n nahxe kilexich.** And then the two boys ran off. **Yehxowinyo:l.** They were chasing Coyote.

Łą' kilexich: **Miłch'ing' yiłxay-ne'en nohwung ch'itehłkyo:t.** Come back here, you stole Daylight from us.

Nahxe kilexich: **Xa' xolisch! Q'o:so:s, diwhkyoh, xa:yont.** Hurry up, get Hummingbird, Grouse, Pigeon.

Q'o:so:s: **Diwhkyoh xa:yont! Xołkit!** Grouse, Pigeon! Catch him!

Łą' kilexich: **K'isdiya:n xontehłtaw yehdo:xołtsis'ung?** Old man, haven't you seen Coyote?

Kisdiya:n: **Da:w.** No.

Nahxe kilexich: **Yiłxay ch'e:we:l nohwung k'ite:wełkyo:t.** Daylight flows out, he stole it from us.

Xayont: **Na:nda'awh!** Bring that sack of daylight back.

Xontehłtaw: **Xa', ch'e:na:niwh'awh.** Ok, I'll bring it back.

Diwhkyoh: **Whe'axołkit.** I caught him.

Xołch'ixolik: **Hay tse:miq'it k'exołwuł.** He threw it down on that rock. **Hay tehmil ts'isgya:s yisxan.** He broke the sack. Daylight came to be. **Ahdiyaw yisxan.** He did it, he brought the Daylight.

Hayah no:nt'ik. That's the end of it.

Language Objectives by Grade Level—

Pre-School: Develop attention span, Practice pronunciation, Improve hand-eye coordination, Increase sentence comprehension

Kindergarten-Grade 2: Practice phonics, Develop vocabulary skills, Build sentence structure skills, Improve verbal performance ability

Grades 3-5: Develop understanding of narrative, Building sentence reading skills, Improve speaking and listening skills

Grades 6-8: Develop interpretation of narrative, Shape ability to read unfamiliar texts, Increase bilingual sentence skills

High School: Build goal-oriented independent study, Promote practice with interdisciplinary approaches, Expand bilingual interpretation skills

6. Expansion

Expansion activities are based on comparisons with what has been taught in a lesson and involve looking at the story in a different way. This can be as brief as comparing one story with another or as lengthy as a series of lessons comparing versions of a story throughout the oral tradition of many tribes.

Many tribes have stories about the coming of fire or daylight. Some tribes visualize both arriving with the coming of the sun. The California stories usually start with a state of unrest where people are in the dark and cold. Then someone is found to have daylight or fire. Coyote frequently, although not always, is the one who makes the attempt to get daylight or fire. Sometimes he steals it by himself, as in the Hupa Coyote Steals Daylight story. Sometimes he delegates this task to various animals, as in the Karuk story Coyote Steals Fire. In most versions of the story, this attempt is successful, and fire or daylight comes to the tribe (Gifford, 1930).

Coyote's role in stealing fire or daylight is typical of his importance in the stories of northern California. Even when other animal characters are the main characters of a story, Coyote is likely to appear. When Coyote breaks taboos, he is often an object of humor, and an example to listeners of tribal standards of behavior. Usually he is portrayed as a male, with his roles ranging from creator to trickster, from buffoon to glutton. Sometimes Coyote's excesses turn to good ends, as when he steals daylight and brings it to the world. He appealed to California storytellers because of the diverse possibilities of his character to demonstrate both the good and the bad and to turn a misdeed into a change in nature that prepares the world for human beings.

Hawaiian and Northern California tribal stories about stealing daylight, fire, and/or sun are listed below:

Cahto: Goddard, P.E. (1907-10). The securing of light (1st version) by Bill Ray, The securing of light (2nd version) by Bill Ray, The stealing of fire by Bill Ray. Cahto Texts. University of California *Publications in American Archaeology and Ethnology, 5*, 96-102.

Gifford, E.W., & Block, G. H. (1990). Stealing of the sun, by the Kato (Cahto) Indians of Mendocino County. In Albert L. Hurtado (Ed.), *California Indian nights* (pp. 153-154). Lincoln, NE: University of Nebraska.

Hawaiian: Beckwith, Martha, (Ed.). (1970). Snaring the sun, Maui the trickster. In M. Beckwith, *Hawaiian mythology* (pp. 229-231). Honolulu: University of Hawai'i.

Hupa/Chilula: Bennett, Ruth. (1983). Coyote steals daylight—Fred Davis, James Jackson, Ruel Leach, Herman Sherman. Ethnographic transcripts, 529a-hl, 529b-hl, 6-23-83 (translation of Hupa text), 785b-hl, 2-17-84(English).

Karuk: Bennett, Ruth, & Richardson, Nancy. (1984). Coyote steals fire by Julia Starritt, retold by Shan Davis. In Pikwa Stories. Center for Indian Community Development, ms. from William Bright, Karok Language, UCB, 1957.

Kroeber, A.L. (Ed.). (1980). Coyote steals light, by Dick Richard's father-in-law. In *Karok myths* (p. 61). Berkeley, CA: University of California.

Fisher, Anne B. (1957). How animals brought fire to man. In A. B. Fisher, *Stories California Indians told* (pp. 46-53). Berkeley, Ca: Parnassus.

Maidu: Gifford, E.W., & Block, G.H. (1990). Mouse regains fire, by the Northeast Maidu Indians of Plumas County. In Albert L. Hurtado (Ed.), *California Indian nights*. (pp. 136-138). Lincoln, NE: University of Nebraska.

Miwok: Curry, Jane Louise. (1987) Mole and the sun. In *Back in the beforetime* (p. 89). New York: Margaret K. McElderry.

Northern Paiute: Kelly, Isabel T. (Ed.). (1938). Coyote shoots the night. Northern Paiute tales. *Journal of American Folklore, 51*, 420-21.

Owens Valley Paiute: Steward, Julian H. (1932). Origin of fire, cottontail and the sun: Myths of the Owens Valley Paiute. *University of California Publications in American Archaeology and Ethnology, 34* (5), 370-71

Pomo: Barrett, Samuel A. (1940). Coyote creates sun and moon, by (Pakokota,) Northern Pomo born at Shorakai, Coyote Valley, on the East Fork of the Russian River. In Samuel Barrett (Ed.), Pomo myths, *Bulletin of the Public Museum of the City of Milwaukee, 15*, 141-147.

Shasta: Gifford, Edward W., Block, G.H. (1990). How coyote stole the fire, by the Shasta Indians of Siskiyou County. In California

Indian nights (pp. 139-141). Lincoln, NE: University of Nebraska.

Tolowa: Goddard, Pliny E. (1902-11). Recovery of the sun, origin of fire. In P.E. Goddard, Tolowa tales and texts. Unpublished manuscript, Museum of Anthropological Archives, University of California Berkeley.

Wailaki: Curtis, Edward S. (Ed.). (1924). Coyote provides daylight by North Fork John (Nahlse (sitting around), Eel River Wailaki. In Edward S. Curtis (Ed.), *The North American Indian* (Vol. XIV, p. 167). New York: Johnson Reprint.

Yana: Gifford, Edward W., & Block, G.H. (1990). How people got fire, by the Central Yana Indians of Shasta County. In Albert L. Hurtado (Ed.), *California Indian nights* (pp. 191-132). Lincoln, NE: University of Nebraska.

Yokut: Curtis, Edward S. (Ed.). (1924). Coyote steals the morning star, by Dick Neale, Chukchansi Yokut. In Edward S. Curtis (Ed.), *The North American Indian* (Vol. XIV, p. 167). New York: Johnson Reprint.

Yuki: Curtis, Edward W. (1924). Fire is stolen from spider, by a Round Valley Yuki. In Edward S. Curtis (Ed.), *The North American Indian* (Vol. XIV, p. 167). New York: Johnson Reprint.

Yurok: Kroeber, A.L. (1976). Grown in a basket by Lame Billy of Weitchpec (Coyote kills the sun and Raccoon restores him, e-k), Theft of fire by Billy Werk of Weitspus. In *Yurok Myths* (pp. 89-94, 237-244). Berkeley, CA: University of California.

Indigenous Language Codification: Cultural Effects

Brian Bielenberg

As many indigenous communities in North America and elsewhere begin to develop language revitalization programs, they inevitably must face the decision of whether or not to incorporate written forms of their historically oral languages into their efforts. In the past, many have argued that a written form of the indigenous language is a necessary component of a successful language revitalization effort. But is this really the case? In this paper I will argue that as indigenous people go about the decision making process, they must first of all be aware of the possible implications that result from how value laden the concept of literacy is. This argument is supported by examining four "communities" that have recently addressed the issue of written indigenous literacy. Particular attention is paid to 1) the history of written indigenous literacy within each community, 2) discussions that occurred around the issue of whether or not to incorporate a written form, and 3) examination of the current functions of indigenous literacy within the community. A final discussion looks at what, if any, changes have occurred in the culture of these communities that can be either directly or indirectly related to the communities' decisions regarding use of a written form of their language. Although there is no way to show a direct cause and effect relation, this paper indicates that cultural change can at least indirectly be tied to written indigenous literacy, especially when the schools and churches exist as the main domain for use.

It is well documented that many indigenous peoples in the Americas and worldwide have begun movements to revitalize and reinvigorate their languages. The reasons for these movements vary, but the fact that in 1996 over 85% of the indigenous languages in North America were reported moribund (Krauss, 1996) certainly plays a role.[1] These movements are tied to a desire to maintain cultural identity and integrity at the local level, and diversity within the world on a broader level. At the same time, they satisfy needs for self-determination and renewed cultural pride. As part of these efforts, many communities, particularly those in North America, face the decision of whether or not to incorporate written forms of their historically oral languages into their revitalization efforts. As indigenous peoples consider codifying their languages, they must be aware of the possible implications that result from relying on a highly value laden medium, literacy, that has been closely associated with assimilation. The decision of whether or not to codify is usually argued from two competing views, those of: 1) 'the nationalists,' who view literacy as crucial to survival of the traditional culture and an indication of their language's equal value with English, and 2) 'the traditionalists,' who reject a written form of the indigenous language as an alien

intrusion. As Spolsky and Irvine note, "the paradox would appear that both groups have the same goal, but they approach it with opposing policies" (1982, pp. 77-78). Both groups are seeking to reclaim their language and renew cultural pride, but their beliefs about the best ways to do this differ.

This paper briefly examines four "communities" that have addressed the issue of indigenous literacy[2] within the past 25 years. I base these examinations on my personal experiences as well as published works of others.[3] In each case I investigate the history of indigenous literacy within the community, identify the views that led to a community's decision concerning whether or not to incorporate the written form of their language in revitalization efforts, and look at the current functions of indigenous literacy within those communities that have chosen to make use of written forms of their languages. In conclusion, I will discuss what changes have occurred in the culture of the community that can be either directly or indirectly related to the community's decision regarding use of indigenous literacy.

Autonomous or ideological model?

Before looking at individual communities, I believe that it is important to situate this paper within the framework of the dialogue surrounding the 'autonomous' versus 'ideological' models of literacy (Street, 1984). Generally speaking, an 'autonomous' model is one which considers literacy to be a neutral technology, a technology that can easily be detached from social context. Followers of this model argue that literacy can be isolated as an independent variable, thereby allowing the predicted cognitive effects of literacy to be examined. The 'autonomous' model attempts to distinguish literacy from schooling, and sets up a dichotomy between written and oral modes of communication. The 'ideological' model, on the other hand, concentrates on the social practices of reading and writing. It recognizes that these practices are culturally embedded, that literacy is a socially constructed practice and thus has different meanings for different groups. This model envisions an overlap of the oral and literate modes.

I argue that literacy decisions in the context of language revitalization must be looked at from the perspective of an 'ideological' model of literacy as opposed to an 'autonomous' model. In examining the discussions surrounding the issue of inclusion of written forms of indigenous languages in revitalization efforts, it soon becomes obvious that no one is arguing for inclusion in order to receive supposed cognitive benefits. The closest any discussion comes to this is when educators make claims for the "transferability" of indigenous literacy skills to English literacy. Unfortunately, for most communities in North America these claims are irrelevant in that many of their children already have English as their primary language. Rather than cognitive benefits, the discussions of literacy involve words and phrases such as 'self-determination,' 'self-esteem,' 'empowerment,' 'self-understanding,' 'gives credibility to the language,' and 'crucial to survival of language and culture.' Watahomigie and McCarty (1996) write "Committing the language to writing is itself a statement about the value the language holds for its speakers.... We need to understand indigenous literacy as social and

political action" (p. 107). Thus, indigenous literacy involves much more than the skills of reading and writing and any cognitive development they may bring about. Literacy in the context of language revitalization involves strong social motives. Those who argue against inclusion of a codified version of their language point out things such as "literacy has been associated with missionaries, anthropologists and disseminators of unpopular BIA policies" (Irvine, et al., 1979). These associations lead the traditionalists to conclude that literacy is "alien."[4] It is quite apparent that ideology and power issues play a dominant role in the decision regarding inclusion of indigenous literacy. As has been written, "the need is to understand literacy as a set of concepts and practices that operate within a cultural context" (McLaughlin, 1992, p. 20). In indigenous communities, the concepts involve the perceived value of literacy in promoting self-awareness and cultural pride and in establishing the indigenous language as "non-primitive."

Sample cases

Historical Use of Indigenous Literacy: I will begin by examining a "community" in which inclusion of indigenous literacy as part of language revitalization efforts has been readily accepted, the indigenous peoples of the state of Hawai'i. Prior to the events that led to annexation, Hawaiian was the primary language of the islands as well as the main language of the schools (Ka`awa & Hawkins, 1997). The Hawai'i public school system included the first high school west of the Rocky Mountains, and its curriculum and administration were entirely in the Hawaiian language (Kamana & Wilson, 1996). Protestant missionaries had developed a writing system in the early nineteenth century, and by the mid 1800s Hawaiian language newspapers were quite common and the literacy rate (Hawaiian literacy) was among the highest in the world (Hinton, 1997). Unfortunately, English-only legislation closed down the Hawaiian language schools in 1896. In 1983, the 'Aha Punana Leo was formed with the goal of reestablishing Hawaiian medium education. Family run preschools were developed in 1984, and by 1987 the State Board of Education was persuaded to open two kindergarten-first grade Hawaiian medium classes to serve the children from Punana Leo (Kamana & Wilson, 1996). The decision to establish Hawaiian medium schools inevitably led to a need for materials. The fact that Hawaiian literacy had once been so prevalent apparently led to the unquestioned decision to include a written form of Hawaiian in revitalization efforts.

The use of the written form of Hawaiian outside of schools today is rather limited, but it is possible to find Hawaiian signs and newspapers in public. Ka`awa and Hawkins (1997) report that it is possible to write checks in Hawaiian. There are several Hawaiian language web pages, and one can purchase a Hawaiian language version of Clarisworks®. Hinton's (1997) paper details observations of the uses of indigenous literacy within Hawaiian language immersion schools. In the classrooms she observed there were numbers, the alphabet, and captioned pictures, all in Hawaiian. A bilingual dictionary including new Hawaiian words (thousands have been developed, especially scientific terms) is published every

few years and is always in a prominent place within classrooms. The University of Hawai'i at Hilo publishes a Hawaiian language newspaper that is distributed and read mainly within the immersion schools. Books and curriculum materials are developed centrally and sent to all the schools. English books, such as *The Little Engine That Could,* are Hawaiianized by pasting Hawaiian language labels over the English text. A number of pieces of literature, both English and traditional Hawaiian, are being translated and/or published for use both inside and outside of school. Technology is playing a large role in establishing domains for written Hawaiian (Ka`awa & Hawkins, 1997). And, of course, the Bible has been written in Hawaiian.

While parents, teachers, and children are "deeply enthusiastic about their work and deeply dedicated to the survival of the Hawaiian language and culture" (Hinton, 1997, p. 17), the process has not been without conflict. Because of the use of Hawaiian within the schools and the need to write textbooks, thousands of new words have been added to the Hawaiian lexicon. A lexicon committee exists that has as its job the coining of new words to be disseminated to the public (Kamana & Wilson, 1996). Many of the *Kapuna*—the Hawaiian word for elders—are uncomfortable with the way the language is now spoken with its different vocabulary and intonation. While literacy cannot be blamed for all of the new vocabulary, it certainly has played a large role in making Hawaiian sound "like a foreign language" to the *Kapuna.*

Recent Inclusion of Indigenous Literacy: Mesa Valley is a pseudonym given to a Navajo community in northeastern Arizona by Daniel McLaughlin, the researcher on whose work much of the following description is based (McLaughlin, 1992). This community chose to incorporate an already established indigenous literacy as part of a bilingual education program in the early 1970s after much debate.

The first known Navajo word list was created in 1849 (Young, 1993). Since then church groups, anthropologists, the Bureau of Indian Affairs, schools, and Navajos have been developing written Navajo. Much of the promotion of written Navajo has come from the schools and churches. Because of this, many traditional Navajos continue to view literacy as alien, as these are alien institutions. On the other hand, a number of educators and tribal leaders have argued that literacy is a necessary component of self-determination and language revitalization.

McLaughlin's study looks at a community that began a bilingual-biliterate program in the early 70s. In establishing the program, community and education leaders needed to address the question of what roles English and Navajo should play in the Navajo development from a traditionally oral to an increasingly literate culture. Many felt that "the development of vernacular literacy instruction [was] part of a larger process of gaining local control of the school" (McLaughlin, 1992, p. 9). They felt that Navajo texts could lead institutions (school, church, BIA) to become more indigenous, less "alien." Others argued that to "get ahead" people needed to speak, read, and write English. They argued that introducing Navajo literacy would take away from valuable English learning time and con-

fuse the kids, that Navajo was never meant to be a written language, that literacy was an alien idea (see Watahomigie, 1996, with a similar discussion concerning Hualapai).

After much discussion, the community did eventually decide to incorporate indigenous literacy. Over 25 years later, its uses are predominately in the school, church, and BIA texts. While it may have made these institutions more indigenous, indigenous literacy certainly has not found its way into everyday life outside of these institutions. McLaughlin noted very few instances of letter writing, list making, or creative writing in Navajo outside of school. He claims that the use of Navajo and Navajo literacy in the schools and churches has encouraged the community to take a much more active role in controlling these two institutions. Navajo literacy has also gained economic importance in that promotion of biliteracy creates economic opportunities, especially for Navajos, within schools, the principal employer in the community.

Recent Development of Indigenous Literacy: This description of literacy is based on my own experiences of living and teaching in an indigenous community as well as on the writings of, and personal conversations with, a linguist who helped to develop the indigenous script.

This tribe has had an official writing system for nearly 25 years. It was developed by a group of non-native linguists in collaboration with tribal members. The initiative for development of an orthography arose from tribal members' desires to introduce the vernacular into the school system, as well as to develop a written language that would benefit the adult community. The fact that a neighboring tribe was developing their own orthography and bilingual program also served as an incentive. Overall, it was believed that indigenous literacy would help to preserve the language and cultural traditions. It was argued that the vernacular needed to be the language of instruction within the schools in order to insure that young children understood what was being taught, with the belief that these skills could later be transferred to English medium education. It was also argued that indigenous literacy would help to bring balance to the lives of adults who conducted oral transactions in the native language, but all written transactions in English. Social and political criteria played a very important role in the final development of the writing system, with the views of the indigenous staff often guiding the decision making process.

Currently, reading and writing of the indigenous script are taught in the local school, through teacher-aide training programs, and in the Protestant church. Some people are also self-taught, but the numbers are quite small. In spite of the prevalence of teaching and the fact that the vernacular is the language of the home as well as informal and formal community settings, there are probably only 10-15 tribal members who read and write it fluently. Most, if not all, use English for writing letters and making lists. There is very little indigenous literature other than school and church materials. Tribal council minutes and the community newsletter are written in English. The two main areas where indigenous literacy is used are within the school and the church.

The amount of indigenous literacy within the school varies from year to year depending on staff, which goes through rapid turnover, particularly in the upper grades and administration. In the past, children have developed native language materials, which are publicly displayed in the local museum and cafe. While I was teaching, the children developed bilingual poetry books. Traditional songs and stories have also been written and are sung and read in the schools. The church has probably shown the strongest interest and increasingly uses the indigenous literacy. It is used for Bible translation, hymnals, gospel readings and even the writing of some new hymns. Other common uses of indigenous literacy are for symbolic purposes, such as letterheads and T-shirts.

Some tribal members view the indigenous writing system as proof that the language is "as good as English" and that their language is not a "primitive" language. However, many of the students I worked with saw indigenous literacy more as a nuisance than a source of pride. Several felt that the only reason their language had ever been codified was so that the Anglos could better control them. The main impetus for continued use of the script appears to come from outsiders, usually educators and people affiliated with the church, and from the native bilingual staff at the school.

Choosing Not To Include Indigenous Literacy: Some indigenous peoples of the American Southwest have made conscious decisions not to include written forms of their language in language renewal efforts. Many of their languages were in the past codified by the church and anthropologists, and some have even been used as part of language programs in the schools. However, after careful examination of the issue, some tribal councils have decided that the language has to be taught and learned in the context of the everyday activities of the community itself. Some of the reasons for this decision are outlined below.

First, in many communities the continuance of traditional religious practices depends on limiting information access to outsiders; a critical key to this access in many peoples' minds is having the language written down. The belief in some communities is that if language is written, it allows potentially anyone to learn how to read, to write down, and possibly to exploit knowledge of traditional religious practices, something that has occurred in the past. Early ethnographers often collected sensitive religious information and wrote and exposed much of it in ethnology reports, which were only later discovered by indigenous people. Secondly, people have begun to recognize the potential impacts of indigenous literacy on a language community. They question why indigenous literacy development should or should not occur. Watahomigie and McCarty also address this issue in their 1996 article entitled "Literacy for What? Hualapai Literacy and Language Maintenance." Thirdly, there are pedagogical issues with regard to writing. The oral and written are considered by some to be two differing modes, which are meant for different purposes. The language must be learned in the context in which it will be used, which for these language communities is the oral. The writing of the language or the development of a writing system are things that may only come at a later date, they are not to be the beginning point for language revitalization.

It is on the basis of the above that some peoples have chosen to avoid the use of any written form of the their language in their language renewal efforts. To date, these revitalization efforts have proven quite successful in the areas of both language and traditional culture renewal.

Discussion

In these samples, both indigenous people who are for indigenous literacy and those who are against it have the same goals in mind, they all want to revitalize a language and culture, a revitalization that they see as necessary to the very continuation of a group of people. Both types of programs have been successful (e.g., Watahomigie & McCarty, 1996; Benjamin, et al., 1996, 1998), and I am sure that other ways could aid language revitalization as well. However, these four samples indicate that inclusion of indigenous literacy does have repercussions on the culture they are attempting to maintain. And even though these studies indicate that indigenous literacy is really only likely to be accepted when the domains and functions for written communication exist prior to the introduction of a new writing system, the cultural repercussions will occur independent of whether there is widespread use of the codified language.

In Hawai'i, historical precedence led to easy acceptance of indigenous literacy and therefore Hawaiian language newspapers and texts are readily accepted. However, codification and the writing of a K-12 curriculum have brought with them the conscious decision to adopt and invent new words, creating a language so greatly modified that some *Kapuna* feel that it is a "foreign" language. In the two communities that have recently adopted use of written forms of their languages, it is only through the domains of the church and school that indigenous literacy has been incorporated, powerful institutions that have historically promoted literacy. Outside of these institutions, indigenous literacy has had little, if any, success. In some Native American communities in the Southwest, they have decided against indigenous literacy because the domain for language revitalization in the community is incompatible with literacy; it would serve no function.

In indigenizing the schools and churches, indigenous literacy has pulled people toward these "alien institutions." Whether good or bad, the culture of the people is changed as the school and church replace informal storytelling and traditional learning and religious practices. Culture is affected by bringing the outside institutions of the church and school into much closer contact with the day-to-day living of the people. While many would argue that this is beneficial in that it provides opportunity for local control and the indigenization of the school and church, it does so at a cost. As school and church come to play a more central role in the lives of indigenous people, the power of these institutions can not help but alter their lives, beliefs, and values, i.e., the very culture people are striving to maintain. Indigenous literacy, by virtue of its use in schools and churches, affects the ways in which traditional knowledge is recorded and transmitted. Not only is transmission affected, but "by virtue of the writing process itself, a great deal of knowledge which is commonly held does not get

included" (Benjamin, et al., 1996, p. 124). Rather than children interacting with elders in the fields and home, learning through "apprenticeship" type relations that reinforce learning over time, the elders are brought to the school to transmit their knowledge in one-hour time blocks. The children who used to listen to the words of the elders now go to books to seek deeper knowledge beyond what is transmitted in the limited interactions allowed for by the structure of schools.

A discussion of the above led a leader of a language revitalization program (personal communication) to elaborate on the cultural changes that indigenous literacy may bring about in a traditional society. He mentioned changes that occur when previously oral stories told by elders at specific times of year are written down. First, an authorship (ownership) of these previously common held stories is incurred. Secondly, when these stories become available in the vernacular the children no longer interact with each other through the stories; rather, it has been seen that children go to the text and engage in the stories on an individual basis. This has also been an issue in other Native American communities.

There is often as well a belief that different groups and clans are entrusted with certain knowledge that only they are to know. In this way, an interdependence is maintained. There is a fear that if indigenous literacy is taught there will be a movement to write down much of this information, thereby making it available to all on an individual basis, again against traditional practices. Once more though, the issue is not whether these changes are beneficial or detrimental. Instead, what is important is that people making decisions regarding the codification of heritage languages be aware of the way culture may be affected.

Another language revitalization program leader related a disturbing, albeit anecdotal, tale of how he had seen indigenous literacy change a people. He related his observations of a people that had once been known for honesty and trustworthiness. When the language was oral the people trusted one another and the word was sacred. As literacy became more prevalent, the people seemed to detach themselves from what was written, they became more likely to go against what they had written, creating an atmosphere of distrust and dishonesty. I have also noticed this effect in African and Mediterranean cultures. The greater the dependency on the written, the less personal trust there appears to be in fellow human beings. Those who write seem to be able to detach themselves from what is written, as if they are no longer responsible for what has been "said." Meanwhile, people begin to distrust the spoken word, fearing that it has less value and can easily be altered. Both directions lead to a loss of trust.

Although there is no way to show any direct cause and effect relation between indigenous literacy and cultural change, nor should we necessarily look for one, this paper does indicate that cultural change can be indirectly tied to indigenous literacy, especially with respect to schools and churches becoming more a part of the culture. As indigenous literacy brings cultural knowledge and traditions into schools, the ways in which information is presented and transmitted is drastically changed, greatly affecting how people interact with one another. This cannot help but influence a culture. Certainly, I am not arguing that

indigenous literacy should be avoided in order to preserve traditional cultures as museum pieces. But indigenous peoples should be aware of the power of literacy in affecting the direction of cultural change, especially when the institutions promoting literacy are the churches and schools.

Notes

[1]In 1996 Krauss reported 175 indigenous languages still spoken in the United States. This compares with 187 indigenous languages spoken in 1992, with approximately 80% moribund. These figures indicate an alarming loss of 12 languages over a three-year period.

[2]In this paper I will use the term indigenous literacy to refer to the "technologies" of reading and writing the indigenous language. However, as will be discussed later, literacy is actually much more than this, involving the attitudes, concepts, and practices surrounding the use of the technologies.

[3]In respect to the requests of members of some of the groups discussed, I have intentionally avoided directly naming them and their tribes. I have also avoided including references to published works that would identify the people and tribes being discussed. All of the information being presented has been documented and thoroughly researched, even when direct references are not presented. The concepts presented are valuable even without directly naming the people and groups involved.

[4]It should be noted that literacy in English is not looked down upon. In fact, no one argues against having English literacy; rather it is often stated that English literacy is a necessity for economic improvement.

References

Benjamin, R., Pecos, R., & Romero, M. E. (1996). Language revitalization efforts in the Pueblo de Cochiti: Becoming "literate" in an oral society. In N. H. Hornberger (Ed.), *Indigenous literacies in the Americas: Language planning from the bottom up* (pp. 115-136). Berlin & New York: Mouton de Gruyter.

Benjamin, R., Pecos, R., Romero, M. E., & Fillmore, L. W. (1998). Reclaiming communities and languages. *Journal of Sociology and Social Welfare, 25*(1), 81-104.

Hinton, L. (1997). Hawaiian language schools. *News from Native California, 10*(4), 15-22.

Irvine, P., Engelbrecht, G., Ortiz, L., & Spolsky, B. (1979). Literacy in the vernacular: A sociolinguistic approach. NIE Report #6-79-0179. Albuquerque, NM: University of New Mexico.

Ka`awa, M., & Hawkins, E. (1997). Incorporating technology into a Hawaiian language curriculum. In J. Reyhner (Ed.), *Teaching indigenous languages* (pp. 151-157). Flagstaff, AZ: Northern Arizona University.

Kamana, K., & Wilson, W. H. (1996). Hawaiian language programs. In G. Cantoni (Ed.), *Stabilizing indigenous languages* (pp. 153-156). Flagstaff, AZ: Northern Arizona University.

Krauss, M. (1992). The world's languages in crisis. *Language, 68*, 1-42.

Krauss, M. (1996). Status of Native American language endangerment. In G. Cantoni (Ed.), *Stabilizing indigenous languages* (pp. 16-21). Flagstaff, AZ: Northern Arizona University.

McLaughlin, D. (1992). *When literacy empowers: Navajo language in print*. Albuquerque, NM: University of New Mexico.

Spolsky, B., & Irvine, P. (1982). Sociolinguistic aspects of the acceptance of literacy in the vernacular. In F. Backin, A. Brandt, & J. Ornstein-Galecia (Eds.), *Bilingualism and language contact: Spanish, English and Native American languages*. New York: Teachers College.

Street, B. (1984). *Literacy in theory and practice*. Cambridge, UK: Cambridge University.

Young, R. (1993). The evolution of written Navajo: An historical sketch. *Journal of Navajo Education, 10*(3), 46-55.

Watahomigie, L., & McCarty, T. (1996). Literacy for what? Hualapai literacy and language maintenance. In N. H. Hornberger (Ed.), *Indigenous literacies in the Americas: Language planning from the bottom up* (pp. 95-113). Berlin & New York: Mouton de Gruyter.

Enhancing Language Material Availability Using Computers

Mizuki Miyashita and Laura A. Moll

This paper describes the authors' use of computer technology to produce an updated online Tohono O'odham dictionary. Access to endangered language materials can be an important factor in the revitalization of languages. The authors describe issues encountered in converting an out-of-print dictionary into a widely available, computer-readable resource, detail solutions that have been developed, and suggest that this process is transferable to materials in other languages.

As computer technology develops and becomes more popular, it is being introduced in many Native American communities, primarily through schools. Furthermore, computer literacy skills are becoming necessary for survival in the modern workplace. At the same time that use of this new technology is becoming widespread, indigenous languages are being spoken less and less. Language revitalization efforts can benefit from more active use of computer resources.

The project described in this paper directly uses computer technology to make native language material available more widely in order to allow its use for language learning and research. This project provides the Mathiot dictionary, an out-of-print Tohono O'odham to English dictionary, in an online format. It also converts the dictionary to a Tohono O'odham to English and English to Tohono O'odham dictionary in the process. We are putting this dictionary online because it is currently unavailable to most people since it is out-of-print, and the availability of materials for language learning and literacy is very important, especially for an endangered language. Additionally, we change the orthography used in the dictionary to the Alvarez-Hale writing system, which is the official orthography of the Tohono O'odham Nation (Zepeda, 1983). In this way, we encourage more consistent use of the official orthography.

We begin by describing the Tohono O'odham language community. This is followed by a discussion of the existing Tohono O'odham dictionaries. We suggest that use of computer technology is advantageous for language stabilization and describe the process of converting a print dictionary into a searchable online dictionary. We finish with a summary of this project and future related projects.

Language community background

Tohono O'odham (formerly Papago) is spoken in Southern Arizona and Northern Mexico. Tohono O'odham and its very close relative, Akimel O'odham (Pima), had a combined total of approximately 25,000 speakers in 1988 (Fitzgerald, 1997). While many adults speak the language, few children are learning it as their first language.

Through the tribal community and formal education, the language is taught to school children. However, this education does not have a great impact on

language stabilization and revitalization owing both to the limited availability of materials and qualified teachers and to the fact that Tohono O'odham is not being spoken in most homes. The Tohono O'odham Tribal Policy encourages the use of the language within the community (Zepeda, 1990). However, the tribe cannot enforce language use among tribal members, and English is commonly used by Tohono O'odham people.

Dictionary resources for Tohono O'odham

There are two dictionaries of Tohono O'odham currently used by language learners and scholars. Both are useful in different ways, but neither is written in the Alvarez-Hale system. The Saxton, Saxton, and Enos dictionary (1983) is most commonly used in Tohono O'odham language courses. It is useful in that it has both Tohono O'odham to English and English to Tohono O'odham entries. However, it contains a limited number of entries. Additionally, the entries do not include much grammatical information or any example sentences.

The Mathiot dictionary (1973) is much more comprehensive than the Saxton/Saxton/Enos dictionary. This dictionary gives more than 11,000 entries, which include detailed grammatical information and example sentences. However, it gives entries only from Tohono O'odham to English and is out-of-print.

Both of these dictionaries are good resources for the Tohono O'odham language community. Each of them has weaknesses that are complemented by the strengths of the other. A combination of these dictionaries, in the Alvarez-Hale writing system, would be ideal.

The Tohono O'odham Dictionary Working Group is working to create just such a dictionary. This is a tribal group that is concerned with stabilizing the language. The group envisions the dictionary as a five-year project and is solidifying a plan for its creation at this time. This group will use entries from the Saxton/Saxton/Enos and Mathiot dictionaries as a foundation, but they intend to type this information by hand. Our project will allow us to provide the dictionary working group with computer disks containing the Mathiot dictionary information. This will save the group much time and effort.

Advantages of using computer technology

There are several ways that the out-of-print Mathiot dictionary could be made available, and there are many advantages to making the dictionary accessible online. In that format, it has the widest potential availability because people can use it without having to buy it. In addition, an online dictionary allows richer searches than a printed dictionary, which is useful for language learners and language researchers. Computerization of the information in the dictionary also allows for easy conversion from Tohono O'odham to English entries to English to Tohono O'odham entries. In addition, an online dictionary of the Tohono O'odham language provides a higher profile for the Tohono O'odham Nation.

Process

The main parts of the process of putting an out-of-print dictionary online are gaining permission of copyright holder, scanning the text, editing the text,

and creating the online dictionary. The first issue to consider in using previously printed material is the copyright. Copyrights on dictionaries are unusual because the entries in the dictionary are not copyrightable as the words themselves are facts, and facts can not be copyrighted. However, the formatting, example sentences, and instructions for dictionary use are created by the author, so they are copyrightable. Since we use the example sentences and grammatical information included in the Mathiot dictionary, we must obtain permission from the copyright holder in order to make this information publicly available.

We are scanning the 864 pages of the dictionary because we estimated that the character recognition of scanning reaches an accuracy rate of 75%. Thus, scanning the dictionary is much faster than typing the entire text. There are several steps involved in the process of scanning. The first is to scan each page, which is like taking a picture of the page and storing it in a computer. Next, we use an Optical Character Recognition (OCR) program to change the picture to characters that can be worked with in a word processing program. The third step is to paste the scanned data into a word processing document. The scanned characters may appear in several different formats, which may also differ from the original text. Therefore, the final step in the scanning process is to make formatting changes in order to regularize the font size and to remove text that is in boldface, italics, and so forth. This entire procedure takes approximately three minutes per page, from book to word processing file.

After completing the scanning process, the dictionary entries are proofread because, as mentioned earlier, the scanning accuracy is about 75%, meaning that 25% of the scanned text is incorrect. In order to obtain a faithful copy of the dictionary, we begin by correcting only the main entries. This is because each O'odham word in the dictionary text needs to be represented by a main entry. First we make global corrections to the main entries using a Perl computer program, and then we manually check the entries in the word processing document because some incorrectly scanned characters involve one-to-many correspondences and others involve special characters, neither of which can be globally corrected using Perl.

Following the correction of the main entries, we generate a Tohono O'odham spell-checking program from these entries and use that program to correct the spelling in the rest of the O'odham text. At this point, we have all the Mathiot dictionary entries in a word processing document. We convert the text to the Alvarez-Hale orthography, and then we are ready to create a web page containing the Mathiot dictionary in a computer-searchable form. Eventually our temporary web page (currently at http://w3.arizona.edu/~ling/mh/lmmm/to.html) will provide all the following features:

1. A space for the user to enter a word in Tohono O'odham or English;
2. A Perl program that returns the meaning(s) of the entered word in the other language;
3. Grammatical information for the Tohono O'odham entries;
4. Example sentences in both languages;

5. Searches by first part of word, last part of word, whole word, or part of word;
6. Suggestion of closely spelled entries if the searched-for entry is not in the dictionary;
7. Links to other O'odham pages (language, culture, etc.); and
8. A description of the steps used to create this online dictionary.

Conclusion

In this paper we discuss how to make out-of-print materials available using computer technology and the resulting beneficial results. One specific result of this project is that it makes this language learning and research information widely available. Also, we are able to provide the Mathiot dictionary information to the community Tohono O'odham Dictionary Working Group in a computerized format. The project makes the dictionary information available in several formats on disks for future purposes. Additionally, there is a comprehensive dictionary available in the Alvarez-Hale writing system, which helps literacy development and encourages consistency in orthography. Finally, the process itself is transferable to dictionaries and other texts of various languages.

There are several related projects that we plan for the future. Once the dictionary is completed, we plan to offer tutorials on its use for students, teachers, and other members of the Tohono O'odham community. The tutorials will include basic computer skills, such as how to use a mouse or how to get online, if needed. We will also request feedback on its ease of use and utility. Finally, we plan to support other language groups with similar projects through a description of the process (on a web page) and direct help.

Note: The authors wish to thank Michael Hammond, Terry Langendoen, Madeleine Mathiot, Delbert Ortiz, Carrie Russell, and Ofelia Zepeda for their support of this project. The authors can be reached at mizuki@u.arizona.edu or mollmoll@u.arizona.edu

References

Fitzgerald, Colleen M. (1997). *O'odham rhythms*. Unpublished doctoral dissertation, University of Arizona.

Mathiot, Madeleine. (1973). *A dictionary of Papago usage*. Bloomington: Indiana University.

Saxton, Dean; Saxton, Lucille; & Enos, Susie. (1983). *Dictionary: Papago/Pima—English, O'othham—Mil-gahn; English—Papago/Pima, Mil-gahn—O'othham* (2nd Ed.). Tucson: University of Arizona.

Zepeda, Ofelia. (1983). *A Papago grammar*. Tucson: University of Arizona.

Zepeda, Ofelia. (1990). American Indian language policy. In K.L. Adams & D.T. Brink (Eds.), *Perspectives on Official English: The campaign for English as the official language of the USA* (pp. 247-256). Berlin: Mouton de Gruyter.

The New Mass Media and the Shaping of Amazigh Identity

Amar Almasude[1]

First, this paper describes the Amazigh people of North Africa and threats to their language and culture from schooling and the domination of Arabo-Islamic ideology. Second, it discusses how modern technology is amplifying cultural safeguards, such as folklore, music, and some print media. Then the idea is developed that inherent in these new communication technologies is something more than an amplifier of the traditional, something that may be a new and extremely powerful force for preserving and shaping the identity of cultural minorities. The new technologies are impacting the knowledge and attitudes of individuals, both affirming cultural identity and developing a cosmopolitan perspective in a way that will spread through society.

In the last two decades of the twentieth century, new communication technology has revolutionized every sociopolitical and economic sector. This technological progress does not necessarily reflect social and economic progress; however, it does provide a means for the expression of oppressed voices that is less subject to government control than newspapers, magazines, radio, television, and movies that needed to be shown in theatres. Different ethnic, linguistic, and religious groups are using the new technology to reconstruct their identities. Hargreaves writes, "what we are witnessing here is the emergence, in the context of postmodernity, of the voices of those who have previously been unheard, neglected, rejected, ignored—the voices of those who have been marginalized and dispossessed" (1994, p. 10). Among those indigenous peoples who have been dispossessed and marginalized and who have suffered all sorts of repression are the Imazighen of North Africa. The Imazighen (meaning "free people") are commonly referred to in the West as Berbers, but I prefer to use their own name for themselves. The name for the language family is Thmazight. The masculine singular noun and adjective is Amazigh and the feminine is Thmazight or Tamazight.

Using an interdisciplinary approach, this paper addresses the question of identity as a historical construct derived from changing sociopolitical and economic environments. This approach is contrary to the traditional sociolinguistic view that considers a language and its speaking community in isolation from constantly emerging forces such as communication technology, including print, analog and digital media, and especially the latest telecommunication systems: satellite dishes and the World Wide Web. The focus of this study is the role played by these forces in confirming the Amazigh identity.

Who are the Imazighen?

In 1000 B.C. the Imazighen people were already long established in North Africa (Shafiq, 1989). In Morocco for instance, they constitute at least 45% of the population distributed among three sub-ethnic groups and dialects (Sadiqi, 1997). Owing to their political and geographical position, the Imazighen have been invaded by Phoenicians, Romans, Vandals, Byzantines, Arabs, and Europeans. Eventually, they all left, except for the Arabs. The Arabs brought Islam, a universalizing religion, and stayed to become an integral part of North African population and heritage. Their language, however, changed and gave rise to what is known as Darija, Aammia, or Colloquial Moroccan. North African countries, including Morocco, are considered today to be an integral part of the Arab World. Constitutionally, these countries claim to be Arab-Islamic Nations. Today, most Moroccans claim Islam as their religion. Given that Arabic is required for the practice of Islam, most Imazighen feel they are Arabs as well, although those who claim to be Moslems are not necessarily Arabs nor do they have to know Arabic. This situation may have also a psychological impact on the self-perception of Imazighen. In June 1987, a missionary from the United States living in the province of Fes wrote to his colleagues in Melilla the following:

> As I began to compare notes with others in our region I realized that Berbers in our key cities and even in my rural town were often apologetic about their "berberness." It is especially true of Mekness and Fes whose imperial Arab history causes Berbers to hide their ethnic roots. This is quite in contrast to some of the other Berber regions of the country. But to a certain degree, I feel that those of us living in urban areas will confront this same thing, maybe not as a rule but at least sporadically. (Gill, 1987, p. 3)

Gill articulates a problematic situation leading to confusion, which is actually a confusion in identity that creates obstacles for the researcher who expects people to be what they say they are. With the fear of punishment and intimidation and the dominance of an Arab-Islamic ideology, in addition to about 50% illiteracy, the situation is even more problematic.

The status of Thmazight and schooling

Grabe (1979) reports that one Amazigh high school student told how God sent the angel Gabriel to distribute languages on earth. As he was flying home, an Amazigh saw him and reminded him, "We haven't received any language yet." Gabriel apologized and explained that he had finished all the languages he had brought from heaven, but would try to look for one. The Imazighen waited and waited, but he never came back. Finally, they tried to make some words, but they could not understand each other. The boy concluded, "I don't think they speak [a language]" (Grabe, 1979, p. 12).

Politically, Imazighen are regarded as lowly and their language, Thmazight, is considered illegitimate. Standard Arabic is held in higher esteem than any

other language. It is the language in which the "Qur'an" (Koran) is written, and since the Qur'an is a sacred text, told word for the word by Gabriel, Moslems do not hesitate to argue for the superiority of such a language. Thus Arabic became the official language of most Islamic countries. Standardized throughout the Islamic World, "Standard Arabic" is used as a first language in schools, for television broadcasts, newscasts, newspapers, magazines, and modern literature. For decades government and political leaders have invested tremendously in an effort to Arabize the masses. To stir up enthusiasm at a scholarly meeting, Abdel Hadi Tazi closed his speech with the following:

> If I had to summarize the process of Arabization that took place during the last quarter of a century in the life of modern Morocco, I would say: what the Kingdom of Morocco has achieved since the return of King Mohammed V from exile [1955] is far more than what Morocco achieved in the long historical period since [689 A.D. and] the conquest of Ugbat Ben Nafia'. (Shafiq, 1989, p. 96)

Lying between Standard Arabic and Thmazight, Darija or Moroccan Colloquial Arabic is the most common language in Morocco. While it is seen as better than Thmazight, in comparison to Standard Arabic it is judged "impure," "aesthetically and expressively inferior," and deformed as a language (Abbassi, 1977, pp. 188 & 230). This language is primarily an amalgam of Standard Arabic, Thmazight, French, and Spanish. It is almost never written, and there appears to be no aspiration towards such a goal. Since it lacks an alphabet and a unique identity, it is considered simply a dialect of Standard Arabic. For such reasons, although it is the most popular language and spoken by most Moroccans, it has no chance to be either an official or a national language. Abbassi (1977) reports that 94% of the participants in a survey reject the idea of integrating Darija in education. This attitude towards the language is common throughout the region, including every sociopolitical class.

Schools, as agents of the State, dedicated their forces to homogenizing the populations of North Africa through the promotion of Islam and Arabic. They usually emphasize that, "We have one religion, which is Islam, and one language which is Arabic" (Khlief, 1991, p. 117). To make the slogan a reality, teachers who were mostly non-Thmazight speakers expressed their hostility towards the indigenous people in several ways. In *Mountains Forgotten By God*, an Amazigh author recalls his primary school teacher:

> You are not even able to speak Arabic, he told us... "You are savages. How will I ever manage to civilize you when I have to start from scratch?"
>
> His words made us go cold and we suddenly felt lower than earthworms.... Only a few days after classes had started he smiled and seemed to have found a solution to our problems. "Come what may," he de-

> clared, "from now on I forbid you to speak even one word of Berber, either among yourselves or with your families...."
>
> We Berber [sic] children greeted his lofty decision with the frozen silence he loved so much, with our heads bent, hands folded, eyes red and bright with sadness and humiliation.
>
> I was already considering how I was going to tell my parents who were unable to understand the teacher's language. Should my parents see me suddenly deny the patrimony of my ancestors and my mother tongue? It would be far better to disappear along with that language. (Oussaid, 1989, pp. 48-49)

From folklore to political discourse

Until the 1970s, the image of Imazighen was associated with folklore, traditional dance, and the entertaining women of the Atlas Mountains. The government of Morocco, benefiting from tourism, the fastest growing industry in the country, encouraged the display of the images of an Amazigh without dignity. Through RTM, Moroccan National Radio/Television, the State had the monopoly over the production of music and all the other media. When the heavy record players and the reel to reel decks became popular, RTM allowed certain independent producers to market the folk music. Alongside Egyptian music and some of the national modern songs, folk dance and folk music were for a longtime the predominant form of entertainment.

When cheap portable audiocassette recorders came on the market, they began to replace the reel to reel tape decks and the record players. Cassette recorders provided Moroccans not only with the option to record and play their favorite music, but also to utilize them as a form of communication on a mass scale. The illiterate emigrants in Europe found the audiocassette recorders useful in corresponding with their family members. Instead of paying a stranger to write for them a letter to their families in Morocco, emigrants could now simply push a button and talk to the audiocassette recorder. When finished, they sent the tape back home, and the family gathered around to listen and respond individually or as a group. The family members in Morocco could share with the emigrant in Europe their activities, including religious ceremonies and family celebrations.

Within Morocco cassette recorders facilitated communication between men and women who found themselves locked behind the doors of their homes. Couples who were in love with each other found cassette recorders very useful for the exchange of their secrets. Most importantly, with the availability of radio cassette recorders ("boom boxes") in 1970s and after, indigenous youth took the opportunity to express their everyday struggle with government, family, and self. They produced hundreds of poems and songs on domestic recorders and distributed them locally. The success of such productions led to the creation of a dozen influential associations with interest in educating the public about the existence of Imazighen. After these groups became popular, music producers became interested and began to market the revolutionary music.

The concerns of the young artists include injustice, poverty, immigration, values, and government corruption. In their political discourse, the poets and singers revolt against the oppressive traditions regarding women. They reject the new sociopolitical and economic system that reduced Imazighen culture to a commodity for the foreign and local tourists. They also demand justice for the national patrimony and the restoration of the Amazigh identity (Almasude, 1993).

The role of music

Why music? It is perhaps the best vehicle to becoming acquainted with humans. It is the expression that is the most pervasive. In songs, human society is portrayed and everyday experiences are reflected. Their themes are usually social issues and historical events, including national and religious feasts and holidays. As children come into the world their skins discover temperature and shapes, their eyes discover light, and their ears discover rhythm, tone, and melody. Such experiences shape the perception of individuals and constitute their world. This phenomenon is what we refer to as the culture of the individual, and it includes various other interconnected elements. As individuals develop as social entities, such environments become more and more complex, but remain integral to one's life.

Thus, music is a fundamental element in human life; it is everywhere we go. It enchants the listener while involving his or her emotions, intellect, and imagination. When the affective domain is explored and sensations are engaged in high and positive experiences, stress and frustration are relieved. In communication, it helps the individual to develop skills in composing and interpreting complex symbols. In society, music is an ideal medium for the development of social skills, such as cooperation and working toward common goals (McCornack, 1984).

As a learning device, songs constitute an opportunity for the exploration of various domains. The most obvious is the venture into the affective domain, which is at the basis of successful learning. Bancroft (1981) contends that besides their benefits for the brain functions, songs provide an enjoyable and relaxed environment for students. They can be used in a variety of educational activities, including listening and comprehension, literary analysis, and the exploration of cultural, linguistic, and communicative content (Claerr & Cargan, 1984). In North Africa, music is the primary medium of entertainment. Music is everywhere: in homes and stores, in the streets, in the public market, and at weddings, feasts, and ceremonies. Loudspeakers are used to make sure the entire town is celebrating. In his description of one of the cities in Northern Morocco, McMurray asserts:

> Nador is awash in music. Over every telephone wire dangles the thin, brown-like remains of a music tape. Little kids play soccer in the streets using the same tape bunched up as a ball. The music stalls lining the street to the bus station blare out a cacophony of competing songs.... Sound saturates Nador. (1992, p. 396)

The challenge of print

In 1989, a book, written in Arabic, appeared in Morocco with a title of *lamhatun aan thalathatin wa thalathina qarnan min tarikhi el' amazighiyyin* [Highlights of thirty-three centuries of the history of Imazighen]. It was written by Mohammed Shafiq, a member of the Royal Moroccan Academy who was, until the appearance of his publication, unknown in the public arena. His book that normally wouldn't be published in Morocco caused a division in public opinion. Implicitly, Shafiq argued that Imazighen had a separate identity from the Arabs. Such a contention was, for a long time, neither a concern of Moroccan scholars nor an issue in the political arena. Morocco, according to the constitution, is an "Arabo-Islamic nation." That was the slogan of the State and the focus of political parties. The popular question in the public arena was that of "we" the Arabs and Moslems against the Jews and the Christians. The struggle of the political parties was primarily based on the distribution of the resources and economic structure of the State.

With his book, Shafiq may be considered the first scholar to break the silence regarding the Amazigh identity.[2] Through the texts of several writers, Shafiq narrates the history of Imazighen. He reports about the works of the pre-Islamic writers regarding not only the existence of an Amazigh people, but a civilization that had an important impact on many other civilizations including the Ancient Egyptians, Greeks, and Romans. Through the works of archeologists, historians, and linguists, Shafiq explores, in a common language, the origins of Imazighen and their past position among the nations. With several illustrations of Amazigh monuments, architecture, textiles, and jewelry, Shafiq boasts about the great civilization of Imazighen and their contribution in philosophy, sciences, and arts.

Thus, the author summarizes the history of Imazighen and the various foreign invasions to their territory. Shafiq distinguishes between two eras in the history of Imazighen: one prior to Islam and the other after the establishment of Islam in North Africa. He presents Imazighen as a nation with a long civilization and history. Unfortunately, the "other" nations that had economic interest in the region were perpetually invading the Imazighen until the arrival of Islam. Shafiq, presents the Islamic invasion as "fat'h," different from that of the Phoenicians, Romans, Vandals, and Byzantines. Although he recognizes the similarity in the method, he considers the Islamic invasion somehow legitimate.

The VCR and the challenge of the missionary

With the availability of VCR's in the region, a group of missionaries from "Frontiers" and "Wycliffe Bible Translators" seized the opportunity to sponsor the translation and the dubbing of *Jesus' Film*, a feature production narrating the life of "Jesus Christ" according to the Gospel of Luke. In 1991, this first movie ever in Thmazight was released on video in Melilla, a Spanish enclave in Northern Morocco. From Melilla, the video was smuggled to Morocco and had instant popularity.

At first, given that Islam recognizes Jesus as a major prophet with great powers from "God," the movie was perceived as a discourse for an Amazigh identity. Regardless of the efforts of the authorities to ban the movie, the Imazighen thought that their turn had finally come to join Modernity. In a sense, the evangelistic message of the movie was overlooked in the need for representation through media.

Two years later however, the Amazigh attitude towards the movie changed drastically. People came to realize the purpose for which the movie was made and began to write to the distributor of the movie in the Netherlands. The correspondents, who felt cheated, argued that the movie is based on the lies of the Jews and Christians who attempt to cause a division among Muslims. They also challenged the distributor saying that the movies they want to see should be Islamic (based on the "Truth") or at least they have to be "neutral."

Most importantly, the movie had an extraordinary impact on the region, especially in terms of redefining the Amazigh identity in relationship to Islam and their political affiliation. From this event, one may understand not only the importance of Islam in the Amazigh patrimony, but also the role of this event in alerting both the States of North Africa and the Amazigh people in terms of the question of Thmazight.

Hypermedia projects and Thmazight

In the 1990s microcomputers became powerful enough to process graphics, sound, and video. When Apple and IBM identified a fertile soil in schools, interfaces were created to make writing computer programming easier for the general public, especially teachers and students with no interest in the technicalities of computer programming and learning computer languages.. Thus, in 1987 Bill Atkinson introduced HyperCard, the first authoring application for Apple (Goodman, 1990). In 1989, IBM released LinkWay. Both authoring applications allow users to develop interactive programs including text, graphics, sound, and links to video players, without computer programming.[3]

Today, there are several authoring systems on shelves or under construction (including Hyperstudio, Authorware, and Macromedia Director) in addition to web editors, presentation software, graphics/drawing and painting programs, animation and audio/video processors, and so forth. Some of these authoring systems are made for small and personal projects and others are used for the development of major electronic publications. The personal systems are easy to master but have limited capabilities, while the professional authoring systems require systematic learning and practice. These application programs provide users with ways to customize or create their own material. Some educators found in such a technology an opportunity for a flexible and inclusive system for the expansion of the experiences of their students. These application programs provide users with the capability to create, manipulate, and store text, graphics, sound, and image. In an educational setting, as individuals or as a team, students can use these application programs to learn mathematics, science, languages, or make their own programs to express themselves using text, graphics, sound,

music, and/or images. From merely using the already made software, today with hypermedia applications, individuals with limited knowledge of microcomputers can compose their own material and distribute it on floppy disks, zip disks, CD-ROM, or publish it on the World Wide Web. Companies such as Geocities (1997) offer free e-mail accounts and several megabytes of space on their servers. Some companies such as Spree.net (n.d.) offer unlimited space on their servers. This is enough to host a large web site with text, graphics, animation, sound, and video files. Such companies also provide subdirectories to help their clients organize their files, a full set of tools, and technical support. Users do not even need to own a computer. They can use a school, business, or library services to access their e-mail and to develop a web site for free in most of the cases.

Currently, we are working at Francis Marion University on the development of an electronic encyclopedia for the preservation and the implementation of the Thmazight language in the public sphere. This project has the objective of encouraging the indigenous people of North Africa to preserve their language/culture. Visual arts, historical artifacts, and songs are the core of the program, which explores various pervasive symbols and metaphors. By listening to the enchanting music and lyrics of the Imazighen, the user will gain insights of their everyday lives. The project provides users with a selection of songs from North Africa. They are invited to browse through the stacks and explore the songs in Thmazight, English, French, and Spanish. Other stacks will include "Spelling Games," "Learn to Write," and "Understand Thmazight."

The Internet and Thmazight curriculum

With the availability of computer communication technology in the 1990s and the growth of an important Amazigh student body in the Western hemisphere, the Imazighen seized the opportunity to build worldwide forums. Through Amazigh-net, for instance, an electronic mailing list established in July 1992, the Amazigh cause took an international dimension (Bouzida, 1994). Currently there are also several dozen web sites that are concerned with the question of Amazigh identity and strategies to implement the Thmazight language into the curriculum and mass media.

Prior to the Internet, the Amazigh identity was an internal question, meaning that Imazighen in Morocco for instance did not know about their "brothers" in Algeria, Tunisia, or Mali. The countries of North Africa succeeded in censuring information regarding the Amazigh community. Given that Imazighen were divided and isolated regionally as subgroups (such as Riffians, Shluh, Twareg, and Kabils), each assumed that their problems were local and did not have any significance to others.

Through Amazigh-net, the different groups of Imazighen began to perceive themselves as one community and the question of Thmazight is no longer that of debating the existence of an identity separate from that of the Arabs, as Shafiq argued. Members of different groups log on daily to discuss not only the urgent situation of Thmazight and Imazighen, but also the plans for the implementation of Thmazight in education, technology, and science.

With the Internet, Imazighen from all over the world have established a Virtual Community through which they have access to the various issues regarding their culture/language and identity. While the Amazigh question has been internationalized, a number of influential scholars, researchers, and talented artists have committed themselves to serve the Amazigh cause. Consequently, several projects aiming at teaching and learning Thmazight have been completed in the last four years. These include the creation of several computer fonts pioneered by the American artist Jo Anna Pettit from Marietta, Ohio, and the development of audiovisual and electronic materials for teaching and learning Thmazight. As a result of such a commitment, North African countries found themselves at an impasse. Through various forces, especially the computer communication technology, they were pressured to recognize for the first time in history the existence of Imazighen as a separate cultural entity.

With a long history and an ancient alphabet, Thmazight is becoming one of the most important issues in North Africa, especially in Morocco and Algeria. The latter, after decades of struggle, was pressured to create in 1990 a Department of Amazigh Language and Culture (Departement de Langue et Culture Amazigh) at the University of Tizi-Ouzou (Lounaouci, 1994).[4] Moreover, in the summer of 1994, the King of Morocco, Hassan II, felt compelled by various sociopolitical forces to recognize the importance of the Amazigh culture and language in Moroccan identity. In his speech, he announced the necessity of integrating Thmazight in the school curriculum (Ennaji, 1997).

Summary

This paper has discussed the recent history of the Amazigh image in various media and described the relationship between cultural identity, language, and the technology of communication. Before World War II, the writings of the Greeks, Romans, French, and Spanish colonizers and the documents of the missionaries and anthropologists had extensively described the Imazighen of North Africa. Such writings set a precedent for indigenous scholars. With the Independence era, after 1960s some North African scholars committed their lives to establishing awareness of the Amazigh existence. Linguists and sociologists studied Amazigh society, language, and culture. But until the last two decades, the Imazighen remained as regionally isolated groups and tribes. The States of North Africa used various strategies to keep the Imazighen under control and even denied their existence. However, with the availability of audio cassette recorders, the Imazighen gained the opportunity to articulate their distinct identity, leading Mohammed Shafiq to publish a controversial text in which he exalts the Amazigh pride and argues that Imazighen are Moslems but not Arabs. Thus Shafiq helped resolve a confusion that for decades the State and political parties tried to impose on North Africans.

After the release of *Jesus' Film*, the Amazigh identity was redefined to prove Shafiq's argument for the crucial position of Islam in the Amazigh patrimony. Both the countries and people of North Africa were alarmed about the situation. With the new developments in computer communication technology and inter-

active media, Imazighen established themselves both nationally and internationally as a distinct cultural group and called for the implementation of Thmazight in the school curriculum and mass media.

Notes

[1]I am grateful to professors Lloyd Hutchings of Francis Marion University and Jon Reyhner of Northern Arizona University for their constructive comments and ideas.

[2]Prior to Shafiq, a number of scholars had called for the recognition of the Amazigh identity, but their writing was primarily published in France in French. Some of those texts were censured and others were too expensive for Moroccan readers. Other writings represented linguistic and sociological research not available in bookstores or public libraries.

[3]Teachers found in this medium an opportunity to create presentations and interactive Hypermedia packages combining text and graphics, supplemented by video. At first Hypercard was black and white and very limited in terms of its capabilities. Later, it became sophisticated. Color was added, as well as the capability to carry sound, sophisticated graphics, and video. A few years later, HyperCard gave rise to HyperStudio, a similar application but very easy to use. Simonson and Thompson (1997, p. 318) describe this application as follows:

> Available for both Macintosh and IBM Windows environment, HyperStudio is designed to encourage student project use of hypermedia. Using HyperStudio, students are able to produce hypermedia projects that incorporate sound, graphics, video, scanned pictures, and several additional features. Easy enough for second graders to use, HyperStudio has become a valuable tool for teachers wanting to make interactive multimedia projects a possibility for their students.

[4]In July 1998, the Algerian government passed a law requiring that state agencies (including schools) and private enterprises (including political parties) use only the Arabic language for all official correspondence and all formal debate or deliberation (Khiari, 1998).

References

Abbassi, A. (1977). *A sociolinguistic analysis of multilingualism in Morocco*. Unpublished doctoral dissertation, University of Texas, Austin.

Almasude, A. (1993). *Defying the Gods: Songs of struggle in the Moroccan Rif, a sociopolitical and semiotic study*. Unpublished master's thesis, Ohio University, Athens.

Bancroft, W. J. (1981). *Suggestopedia and Soviet sleep-learning*. ERIC Document Reproduction Service No. ED 206 161.

Bouzida, D. (1994). Worldwide Amazigh electronic forums. *Amazigh Voice, 3*(2).

Claerr, A. T., & Cargan, R. (1984). The role of songs in the foreign language classroom. *Ontario Modern Language Teacher's Association Journal*, 28-32.

Derouich, O. (1994). Tughalin Seg Temd'elt. *Tifawt, 4*, 24-32.

Ennaji, M. (1997). The Sociology of Berber: change and continuity. *International Journal of the Sociology of Language, 123*, 23-40.

GeoCities. (1997). http://www.geocities.com/join/freehp.html

Gill, B. (1987). Untitled confidential report from personal file.

Goodman, D. (1990). The complete HyperCard 2.0 handbook. New York: Bantam.

Grabe, W. (1979). *Morocco: Diglossia?... Triglossia?* Working papers in applied linguistics. Athens, OH: Ohio University.

Hargreaves, A. (1994). Restructuring: Postmodernity and the prospects for educational change. *Journal of Educational Policy, 9*(1), 47-65.

Khiari, R. (1998). Arabic the official language of Algeria. *Associated Press*, July 5, 1998.

Khlief, B. (1991). The place of Arabic in identity maintenance of Moroccans in The Netherlands: An exploratory study of some school textbooks. In K. Jaspaert & S. Kroon (Eds.), *Ethnic minority languages and education*. Amsterdam: Swets & Zeitlinger.

Lounaouci, M. (1994). La question Amazigh en Algerie. *Tifinagh, 2*, 38-43.

McCornack, M. (1984). Why music is basic. *Music Educator Journal, 70*, 31.

McMurray, A. D. (1992). *The contemporary culture of Nador, Morocco, and the impact of international labor migration.* Unpublished doctoral dissertation, University of Texas at Austin.

Oussaid, B. (1989). *Mountains forgotten by God: The story of a Moroccan Berber family*. Washington, DC: Three Continents.

Sadiqi, F. (1997). The sociology of Berber: The place of Berber in Morocco. *International Journal of the Sociology of Language, 123*, 7-21.

Shafiq, M. (1989). *Lamhatun aan thalathathatin wathalathina qarnan min tarikh al' amazighiyin* [Highlights of thirty-three centuries of Imazighen]. Rabat, Morocco: Al Kalam.

Simonson, R. M., & Thompson, A. (1997). *Educational computing foundations.* Upper Saddle River, NJ: Simon & Schuster.

Spree.com. (n.d.). http://members.spree.com/sg/default.asp

Tamazight in Morocco in schools. (1994, November). *Amazigh Voice, 3*(2), 23.

Other related publications

Abu-Lughod, L. (1989, July/August). Bedouins, cassettes and technologies of popular culture. *Middle East Report*, 7-11.

Bertrand, C. (1982). Morocco. In D. Boyd (Ed.), *Broadcasting in the Arab world.* Philadelphia: Temple University.

Boukouss, A. (1992). *Allughatu-ethaqafatu elamazighiya* [The Thmazight language and culture] *1*, 105-111, Rabat, Morocco.

Chami, M. (1992). alibda? eladabi wa ishkalyatu ellugha [The literary creativity and the problematics of linguistic pluralism] *1*, 112-124, Rabat, Morocco.

Davis, S., & Davis, D. (1989). *Adolescence in a Moroccan town.* New Brunswick, NJ: Rutgers University.

Grabe, W. (1979). Morocco: Diglossia? . . . triglossia? *Working papers in applied linguistics.* Athens, OH: Ohio University.

Hart, D. (1976). *The Aith Waryaghar of the Moroccan Rif.* Tucson: University of Arizona.

Identite Culturelle au Maghreb. (1991). Series: Colloques et Seminares #19 Rabat, Morocco: Faculte des Lettres et des Sciences Humaines.

Langue et societe au Maghreb: Bilan et perspectives. Series: Colloques et Seminares # 13 (1989). Rabat, Morocco: Faculte des Lettres et des Sciences Humaines.

Le Maroc et la Holland: Etudes sur l'histoire, la migration, la linguistique et la semiologie de la culture. (1988). Series: Colloques et Seminares # 8. Rabat, Morocco: Faculte des Lettres et des Sciences Humaines.

Kabbaj, M. (1979). Traditional child socialization and the incursion of mass communication in Morocco. *International Social Science Journal, 31*, 429-443.

Mohamed, A. (1982). *La radiodiffusion television Marocaine.* Doctorate de troisieme cycle. Universite de Droit, d'Economie et de Sciences Sociales de Paris, France.

Moumen, Diouri. (1992). *A quien pertenece Marruecos.* Madrid, Spain: Dictext.

Mounir Shafiq. (1992). *Qadhaya ttanmiyya wa listiqlal fi SSira'i l'hadhari* [Issues of Development an independence in the struggle of civilizations.]

Nelson, H. (Ed.). (1985). *Morocco: A country study.* Washington, DC: American University.

Nisan, M. (1991). *Minorities in the Middle East: A history of struggle and self-expression.* Jefferson, NC: McFarland.

Omran, Abdel-Rahim. (1980). *Population in the Arab world: Problems and prospects.* New York: United Nations Fund for Population Activities & Croom Helm.

Seddon, D. (1981). *Moroccan peasants: A century of change in the eastern Rif, 1870-1970.* Folkestone, Kent: Dawson.

Seddon, D. (1989). The politics of adjustment in Morocco. In B. Campbell and J. Loxley (Eds.), *Structural adjustment in Africa.* New York: St. Martin's.

Shafiq, M. (1992). alamazighiya wa elmas'ala eththaqafiya bilmaghrib [Thmazight and cultural problematics in Morocco] *1*, 92-97, Rabat, Morocco.

Soudan, F. (1993, January 7-13). Guerre a la drogue! in *Jeune Afrique, 1670*, 16-20.

Suhamy, H. (1981). *Les figures de style.* Paris: Presses Universitaires de France.

Tassadit, Yacine. (1990). *Ait Menguellet Chante...* Algers, Algeria: Bouchene/Awal.

Wagner, D., Spratt, J., & Ezzaki, A. (1989). Does learning to read in a second language always put the child at a disadvantage? Some counterevidence from Morocco. *Applied Psycholinguistics, 10*, 31-48.

White, R. (1983, Summer). Mass communication and culture: transition to a new paradigm. *Journal of Communication*, 279-301.

Self-Publishing Indigenous Language Materials

Robert N. St. Clair, John Busch, B. Joanne Webb

Indigenous language programs that have a literacy component require the production of reading material. Recent advances in computer technology and certain legal changes in the publishing industry have made self-publishing an easier task. This paper describes some of the steps necessary to self-publish indigenous language materials. The authors provide references, technical information, and guidance based on their own experiences in publishing. They also discuss how one can use the World Wide Web to present materials for sale or for wider distribution.

Publishers and printers are involved in producing books. Publishers work with manuscripts, evaluating them for content, checking them for editorial style, seeking markets for them, and getting cost estimates for printing them. Publishers have access to ISBN numbers, register their books with the federal government under the copyright law, and inform distributors that their books are going to press. Printers, on the other hand, own their own printing presses. They accept payment from people who publish books and provide them with printed books. They base the cost of printing on their current overhead costs. A printer who bought equipment in the days prior to the electronic printing press paid around $500,000 for equipment and, thus, must charge more for his or her services than one who only paid $55,000 for an electronic printing press with full color capabilities. When you seek a printer, look for one that can afford to give you a lower rate.

To be a printer you must own a printing press. But, you can become a publisher with very little investment. You do not even need to rent office space, but can instead work within your own home using computer technology you probably already own. And there are ways to fund the printing of your books. One way in which publishers cover printing costs is by offering a pre-publication special. They advertise a book for the pre-publication cost of $13.95 and the regular publication cost of $19.95. Once the pre-publication money comes in, they use it to finance the printing of the book. If you have a very small run of a book (about 30 copies), you might even check with a printer such as Kinko's. They will give you an estimate and break down the cost factors for you.

Some successful self-publishers

The earliest contemporary self-publishers were people who wrote books on computers. These people produced camera-ready copies of books on how to use software programs, how to build computers, and how to program software projects. Later, other professionals joined the self-publishing world. Two educational psychologists in Oregon, for example, wrote a textbook and published it

under their imprint, Impact Publishing. They sold over 250,000 copies and soon found themselves competing with such giants as Educational Testing Service (ETS). Lawrence Erlbaum, a psychologist, is another self-publisher. He created his own publishing house and soon became a major source of books on psychology. He later expanded his company to include books on communication under the name of Ablex Publishing. What these people have in common is quality control. They know their subject matter.

Why it has become easier to self-publish

There are five major publishing giants in the United States, each of them known under hundreds of different names or signatures. They use one name for publishing textbooks, another for publishing romance novels, another for murder mysteries, and so on. Oil companies own four of these giants, and a movie studio owns the other. These companies are successful because they publish thousands of copies of books for a very low per-copy cost. They also have tax laws that support their business operations. In the past, it was difficult to compete with these giants. They had the money, the connections, and the distribution channels. Some of them even owned printing presses.

Something interesting happened in the printing industry to change the publishing giants' advantages. The change came about because Frank Valenti, a lobbyist for the film industry, argued that new laws were needed to protect the movie and CD industries from pirating. Congress passed these laws, taking away many of the advantages that publishing conglomerates had over the small self-publisher. They were now forced to do short runs, which caused their costs to be substantially higher. This change was immediately noticed in the pricing structure of books. Paperbacks that previously sold for $6 now sold for $16. Small publishers have always done small runs of books. Now the large publishers were doing the same thing.

Something else happened to the publishing industry. The tools of their trade, electronic publishing, were now available to everyone for under $2,000. Big publishing houses once paid $60,000 or more for their equipment. Now we have the same capabilities in our personal computers for a fraction of that cost.

Four ways to reach the world

Since it is not cost effective for them, large publishing houses do not want to invest in books that do not have a wide distribution. They want to publish books that will be ordered in 30 or more copies at a time. Over 80% of all books published are non-fiction, and textbooks make up a large portion of this number. There are over 4,300 colleges and universities in the United States, and large publishing companies favor this market over all others. How do we get around the fact that the large publishing houses are not interested in our books? There are three alternatives:

- Submit one's manuscript to a number of small presses and hope for a contract. The advantage of a small press is that it will take care of all of the intricacies of publishing from printing the book, through marketing it, to filling orders. They will even handle the copyright for you.
- Pay a printer and publish the materials yourself. This requires a lot of work as you must be able to come up with camera-ready copy, design the cover, handle graphics quality, and prepay the printer for a small run.
- Self-publish an electronic version of the materials on the Internet. If the copyright is not an issue to you, then you can share your materials in this public domain. You will need to work with a Webmaster who will help you with creating WEB pages and links to other sites.

Getting started in self-publishing

There are a number of good books that will take you through this process. A classic among these is a book by Dan Poynter, *The Self-Publishing Manual*. These books direct the self-publisher to use printing services. These services are not sensitive to publishers with small printing runs under 500 copies. The setup costs for printing books tend to be very expensive. It currently costs around $5,000 to print 500 copies of a 300 page book with a color cover. As the print run size goes up, the cost per book goes down. If the same book had a print run of 5,000 copies, the cost would only be $15,000, or only $3 per book. Nevertheless, some companies do short runs for less. The aforementioned book provides you with this information. Kanti Communications, Inc., is one of the sources not listed for short runs under 50 copies (contact Chuck Burke, 507-897-1494).

Short run printers can provide books that are bound in several formats. The most common is perfect binding. However, if you are using a book for classroom use where the pages need to be opened flat across a desk, you might want to use a spiral binding. If you have a very small run for only local use, you can approach printing shops such as Mail Boxes, Etc. or Kinko's and ask them to duplicate your manuscript and bind it for a reasonable cost.

If you want to become a printer as well as a publisher, you need to buy your own equipment. The cost for the top-of-the-line capabilities is around $55,000. However, you should be able to do as well with less sophisticated equipment for around $10,000.

The biggest problem for self-publishers is marketing. Often journals will not review self-published books, and sometimes bookstores will not stock them. Keep in mind that you do not have a sale until the retail customer actually purchases your book. Even books sent to a bookstore may be returned if they are not sold. However, by doing a short run that is meant for a specific audience, you can easily bypass the high costs of advertising and book distribution. What all of this means, in essence, is risk management. You can take a big risk and print a large run or you can take less of a risk and publish a smaller run. What you do not want to do is have many boxes of unsold books cluttering your office or home.

The dissemination of information is another advantage for self-publishers. Once you have obtained an ISBN number for your book, it will be listed on the computer network of books and will appear in the annual *Books in Print*. You can approach several electronic publishers and ask them to list your book. The markup is usually around 25-40%, and this is why most publishers mark up their books by this amount or more for bookstore distribution. You may want to create your own website and sell your book either by encrypting credit card information or by having people print out an order page and send in the money along with the order.

Electronic publishing

There are many book companies that only sell their products over the World Wide Web. One of the more successful electronic bookstores is Amazon.com. You can set up an electronic bookstore if you have access to a website. The Webmaster will create a link for you. You can either sell the book over the Internet or provide access for downloading large portions of the book to be printed out as hardcopy. The Teaching Indigenous Languages website at Northern Arizona University does both. As you visit other websites dealing with indigenous languages, you will notice that many have taken advantage of the multimedia capabilities of the Internet. They provide language lessons, cultural music, traditional chants, and other kinds of sound formats. Many have incorporated videos and even interactive programs ranging from e-mail to chat rooms. There has never been a better time for marketing your books through the Internet.

Comments on text format and style

Once you have made decisions about the way to publish your book, you can turn your attention to format. Your first step should be to contact the printer you will be using in order to find out what their format requirements are and how they organize page sections. Most printers work in 32 page sections. Some may require only a minimum of 8 page sections. Your printer will also tell you the size of the text area on each page and will provide you with margin requirements. You will need this information even if you are doing camera-ready publishing.

Choosing fonts

The font style you choose will have a great impact on the reception of your material, so careful thought should be given to selecting fonts. Some fonts give the impression of casualness, while others set a more formal tone. Some fonts are easier to read than others. This is true of Times Roman (the font used in newspaper print) and Garamond. Both of these fonts are serif typefaces, meaning they have small extensions that extend from the main strokes that help the eye to move from letter to letter more smoothly. Those fonts that do not have these extensions are called sans serif (without serif). Sans Serif fonts can be used for titles and headers to add variety to your print. You should limit the number of fonts you use to two or three in order to avoid giving the book a

cluttered look. Baskerville, Berkeley, Bookman, Caledonia, Caslon, Garamond, Goudy, New Century, and Palatino would all be good fonts for a book.

Use proportional typefaces where wider letters take up more space than narrower ones. If you use the same typeface throughout your manuscript, you should vary it by using larger bold fonts and capital letters for titles and subheadings.

Font size can vary greatly among typefaces. For a font like Times Roman, the 10 point size is normal for a book's text and 9 point size for footnotes. Some publishing companies demand that you use their font size requirements. However, if you are self-publishing, you may choose and vary the font size.

When we create language and culture texts, we often need to use very special fonts such as Navajo, Lakota, Salish, and so on. You can find these on the Internet by doing a search under "fonts." You will find a host of font sites available for either the PC or the Macintosh. Many of these font sites are free. When you download these fonts, you are downloading a family of fonts that are going to be used for your monitor screen, your printer, and your word processor. Make sure that these are adjustable size fonts. If you are using a modern personal computer, this should not be a problem. If you are using something less than Windows 3.1, you may be rather limited in the kinds of fonts available to you.

When printers use camera-ready copy, they photograph the pages you provide them (mistakes and all) and print from those photographs. To produce camera-ready copy almost any good word processing software can be used, such as Microsoft Word©. Thus, you can draw in special diacritical markings that many Indian languages use if you cannot find a font that will produce them. However, technological advances have made printing from camera-ready copy more expensive than printing directly from downloaded computer files using modern desktop page layout software such as Adobe PageMaker© and QuarkXpress©. Page layout software requires "postscript" fonts. Some fonts especially developed for indigenous languages will work with standard word processing software, but will not work when these word processing files are imported into page layout software files.

If you begin your manuscript in a word processing software such as Microsoft Word© because of its convenience, you can run into serious trouble when you try to import those files into a program such as Adobe PageMaker©. Whichever route you go, do a test run of a page of material to make sure the fonts you are using will work with the software you are going to ultimately use before you commit a lot of time on your project. If you are going to use page layout software, work with your printer since you need to use software that is compatible with what he or she is using. However, printers are usually inexperienced with special indigenous language fonts, so you need to make sure the printer can handle whatever fonts you are using. Printers using computer typesetting can either create the masters directly from your computer files for their printing press for print runs over about 1,000 copies, or, for shorter runs, they can feed the information directly from their computer into a modern high speed copy machine.

Word processing software creates relatively small computer files. If you decide to include pictures or graphics in your computer files, which is easy to do with modern word processing software, the amount of memory needed goes up dramatically. A high-end computer with a CD ROM drive is needed to load the more advanced software (whether it be word processing software or desktop publishing software) onto your hard drive to handle graphics. In addition, high capacity auxiliary drives, such as ZIP© drives, that handle more data than the ordinary high density drives, are needed in order to save your files for transit to the printer. Of course, you need to check with your printer to find out what type of auxiliary drive he or she uses.

Style consistency

Consistency is the key to creating a professional looking book. To accomplish this, you will need to make some decisions regarding the style of different components of your book. Once these decisions are made, apply them consistently throughout the book. The following are basic concerns: size and style of type you will use, placement style for graphics and artwork, form for captions, style for subheadings within your text, spacing before and after titles and subheads, form for running heads, and style and location of page numbers.

There are some standard conventions in publishing that you should be aware of. All commas and periods go inside quotation marks. All other marks of punctuation go outside of the quotation marks unless they are part of the quoted material. Extended quotes (quotes that run over 4 typed lines) should be indented and set in a font size that is one point lower than the regular text. Use italics instead of underlining for titles of works, for foreign terms, and for emphasis. When you want to separate items by a dash, do not use hyphens. Your word processor has long dashes (ems and ens dashes). You can find them in Word by going to *Insert* and finding *Symbol*. It is also customary to just have one space after end-of-sentence punctuation.

Copyediting and proofreading

Effective communication depends upon clarity. For this reason, you should edit your manuscript carefully, watching for information that might be unclear to the reader or for structural problems in the presentation of material. Revision should go through two steps: copyediting and proofreading. In copyediting, you will be clarifying the focus and intent of your manuscript and reorganizing its content and structure. This means that you will be rewriting sentences in order to improve the readability of the manuscript. You will also need to double check endnotes or footnotes to make sure that the sources you have cited are well documented.

At this time, you should also check the total number of words you have directly quoted from each cited source. The amount of words you can quote from another source without permission from the author is limited. To avoid this problem, you should paraphrase as much as possible. Even with paraphrasing, however, you should be careful to acknowledge the original author of the information.

Once you have copyedited your manuscript, do a thorough proofreading (more than once) looking for misspelled words, grammatical errors, etc. Reading it aloud will help you pay closer attention to what is written. It is also a good idea to have another person read through your manuscript.

Although word processors come with built-in spell checkers, you cannot depend upon them fully. They are no help at all for anything written in an indigenous language. They do not correct most grammatical errors or errors involving punctuation, and they do not differentiate between ambiguous words or semantic inconsistencies.

Things to do before the final pages go to press

After the final pages are printed out and have been proofread carefully once again, you have a few last minute things to double check. The first is to check the page numbers. Right-handed pages (recto) should have odd numbers. Left-handed pages (verso) should have even numbers. Check the running heads on every page. Left-handed pages should have the book title and right-handed pages should have the chapter title. Check the Table of Contents page and make sure that the chapter titles are listed correctly and that the page numbers listed correspond with the actual numbers in the book. If you have a page that includes a list of figures or tables, make sure that those names and page numbers match. Check to see if captions are included for all graphics and artwork. Finally, check to see that all sources are properly cited and acknowledged and that all quotes are correctly transcribed.

Sending in your camera-ready copy to the printer

You are now ready to send your manuscript to the printer. However, there are several things that you need to be aware of. Did you print out the copy on a printer that uses 300 dots per inch (300 dpi) or better? Be sure to send the original copy of your manuscript to the printer, as a copy will not be of the same quality. For example, if you printed something on a 600 dpi printer and have it copied on a copier, you will probably end up with only 200 dpi, as even high quality copiers only do 300 dpi.

When you are printing your final copy, make sure that your toner is not running out as this will produce pages that are not evenly dark. Put your final manuscript in a suitable box when you take it to the printer in order to avoid having wrinkled or marred pages.

Conclusion

Our electronic word processors provide us with a great range of editing capabilities. We can change fonts, gallery styles, adjust footnotes, use bullets, use drop case graphics, insert pictures or files, and check documents for spelling and grammar. More importantly, we can cut or copy and paste material within our manuscripts. What this amounts to is that we can now produce high quality camera-ready copy for print production.

There has never been a better time to enter into self-publishing. There are more books on how to self-publish than ever before. At the end of this article is a bibliography of some of the best of these available materials, as well as a few useful websites concerning formatting and style. Use that information as a springboard for your own research into the rapidly expanding world of self-publishing.

Begin to think of the books you are using in your language and culture classes as self-publishable materials. If you want to publish a book in your own native language, you can now do so with ease. Thanks to the information and technology now available to you, you can share your knowledge of indigenous languages with others.

Selected bibliography

Barker, Malcolm. E. (1990). *Book design & production for the small publisher*. San Francisco: Londonborn.

Beach, Mark; Shepro, Steve; & Russon, Ken. (1986). *Getting it printed: How to work with printers and graphic arts services to assure quality, stay on schedule, and control costs*. Portland: Coast to Coast.

Bins, Betty. (1989). *Better type*. New York: Watson-Guptill.

Colin, Weildon. (1995). *Type and layout: How typography and design can get your message across—or get in your way*. Berkeley: Strathmoor.

Craig, James. (1992). *Designing with type: A basic course in typography* (3rd ed.). New York: Watson-Guptill.

Ferris, Byron. (1996). Book reviews on type and layout. *Communication Arts, 38*(3), 200-201.

Graham, Walter B. (1987). *Complete Guide to Paste-up* (3rd ed.). Omaha: Dot Pasteup Supply.

Meeks, Christopher. (1997, Sept.). You can do it all: Are you and your computer the new world order in publishing? *Writer's Digest*, pp. 19-21. [Includes list of websites for desktop designers]

Parker, Roger C. (1993). *Looking good in print: A guide to basic design for desktop publishing* (3rd. ed.). Chapel Hill: Ventana.

Poynter, Dan. (1992). *Book production: Composition, layout, editing, design, getting it ready for printing* (3rd ed.). Santa Barbara: Para.

Poynter, Dan. (1988). *Publishing short-run books: How to paste up and reproduce books instantly using your quick print shop* (5th ed.). Santa Barbara: Para.

Poynter, Dan. (1995). *The self-publishing manual: How to write, print, and sell your own book*. (8th ed.). Santa Barbara: Para.

Ross, Tom, & Ross, Marilyn. (1994). *The complete guide to self-publishing*. Cincinnati: Writer's Digest.

Schoonmaker, Dave. (1995, Sept.). You just worry about the words . . . Let your computer do the formatting while you concentrate on the writing. *Writer's Digest*, pp. 60-61.

Tinkel, Kathleen. (1998, Jan.). 10 typographical blunders (How to keep errors out of documents). *Macworld*, pp. 117-19.

Your complete guide to successful self-publishing. (1997, Aug.). Writer's *Digest* . (Special Issue on self-publishing).

Useful Websites

http://www.gfmurray.com/jargon_watch.html ["Watching Our Language: Terms Self-Publishers Will Find Useful."]

http://www.booksatoz.com/prepress.htm ["Books A to Z: Design and Prepress"]

http://www.DesktopPublishing.com [general information]

http://www.will-harris.com/esp1.htm [an interactive website to help people select fonts]

http://www.dgusa.com [graphics and design ideas]

http://www.calumet.yorku.ca/calumet/computing/howto/Word/WordFAQ.html [Microsoft Word's Frequently Asked Questions]

http://gpu.srv.ualberta.ca/HELP/wordpro/wd1216.html [Word for Windows 95 Frequently Asked Questions—Product Support Services]

http://www.ntu.ac.uk/cs/wp.htm [Word Perfect's Frequently Asked Questions]

http://www.proofing.com/proofingcom/pages/FAQ [Word 7 and Word for Mackintosh Frequently Asked Questions]

http://www.columbia.edu/acis/bartleby/strunk/ [Strunk and White's *Elements of Style* on-line]

http://www.eeicom.com/eye/eyeindex.html [Index to articles on editing from *Editorial Eye*]

http://www.copyeditor.com:80/Links.html [Links for copyeditors]

Style Guides

Publication manual of the American Psychological Association (4th ed.). (1994). Washington, DC: American Psychological Association.

The Chicago manual of style. (1993). Chicago: University of Chicago.

MLA handbook for writers of research papers (4th ed.). (1995). New York: Modern Language Association.

Contributors

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Brian Bielenberg is currently working toward a Ph.D. in education at the University of California at Berkeley. His main areas of interest are indigenous literacy, language revitalization, school/community collaborations for revitalizing languages, and second language acquisition. His interest in these areas arises out of experiences in such diverse places as Cameroon, West Africa, India, Supai, AZ, and on the Hopi Reservation. These varied experiences have led him to focus on how languages are acquired, why some people lose their language while others are able to maintain theirs, and what role schools can play in maintaining language and cultural diversity. E-mail: btberg@uclink4.berkeley.edu

Harold Campbell, Hupa/Tolowa, is a member of the Hoopa Valley Tribe, a staff member in the Hupa Language, Culture and Education Program and the Johnson O'Malley K-12 Program of the Hoopa Tribe, and a college student at College of the Redwoods in northern California. His special interest is reviving the Indian Stick Game, a men's sport in Native northern California.

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Francis E. Flavin (B.S. in computer and information science, University of Massachusetts, Amherst, M.A. in history, Indiana University) is presently a doctoral candidate in history at Indiana University specializing in Native American history and is a research assistant at the American Indian Studies Research Institute.

Stephen Greymorning taught courses on linguistics, comparative Indian legislation, and aboriginal self-government at the University of Alberta in Canada from 1988 to 1992 and in 1997 at Southern Cross University in Australia. After receiving his Ph.D. in Political Anthropology from the University of Oklahoma in 1992, he accepted a two-year contract to serve as director of the Arapaho Language and Culture Project for the Wyoming Indian Schools (K-12) at Ethete, Wyoming. While his academic interests have focused on Aboriginal sovereignty issues, he has continued to develop programs and strategies toward revitalizing American Indian languages and is the Executive Director for Hinono'eitiit Hoowu' the Arapaho Language Lodge on the Wind River reservation in Wyoming. Dr. Greymorning is currently a professor at the University of Montana in the departments of Anthropology and Native American Studies.

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Delilah Yellow Bird (Arikara), a native of the White Shield community, is a teacher in the White Shield School on the Fort Berthold Reservation in North Dakota. She coordinates Arikara language instruction in the elementary and secondary grades and is currently implementing the use of the multimedia lessons described in her paper in this volume.

Revitalizing Indigenous Languages contains a selection of papers presented at the Fifth Annual Stabilizing Indigenous Languages Symposium "Strategies for Language Renewal and Revitalization" held in Louisville, Kentucky, on May 14-16, 1998. This conference brought together over one hundred indigenous language experts, teachers, and community activists to share information on how indigenous languages can be best kept alive. The goals of the Stabilizing Indigenous Languages Symposiums, which have been held annually since 1994, are:

- To bring together American Indian and other indigenous language educators and activists to share ideas and experiences on how to effectively teach American Indian and other indigenous languages in and out of the classroom.
- To provide a forum for the exchange of scholarly research on teaching American Indian and other indigenous languages.
- To disseminate through monographs recent research and thinking on best practices to promote, preserve, and protect American Indian and other indigenous languages.

The papers collected here discuss opportunities and obstacles faced by language revitalization efforts, programs and models for promoting indigenous languages, the role of writing in indigenous language renewal, and how new technology is being used to compile indigenous language dictionaries, publish indigenous language materials, and link together dispersed indigenous language communities.

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